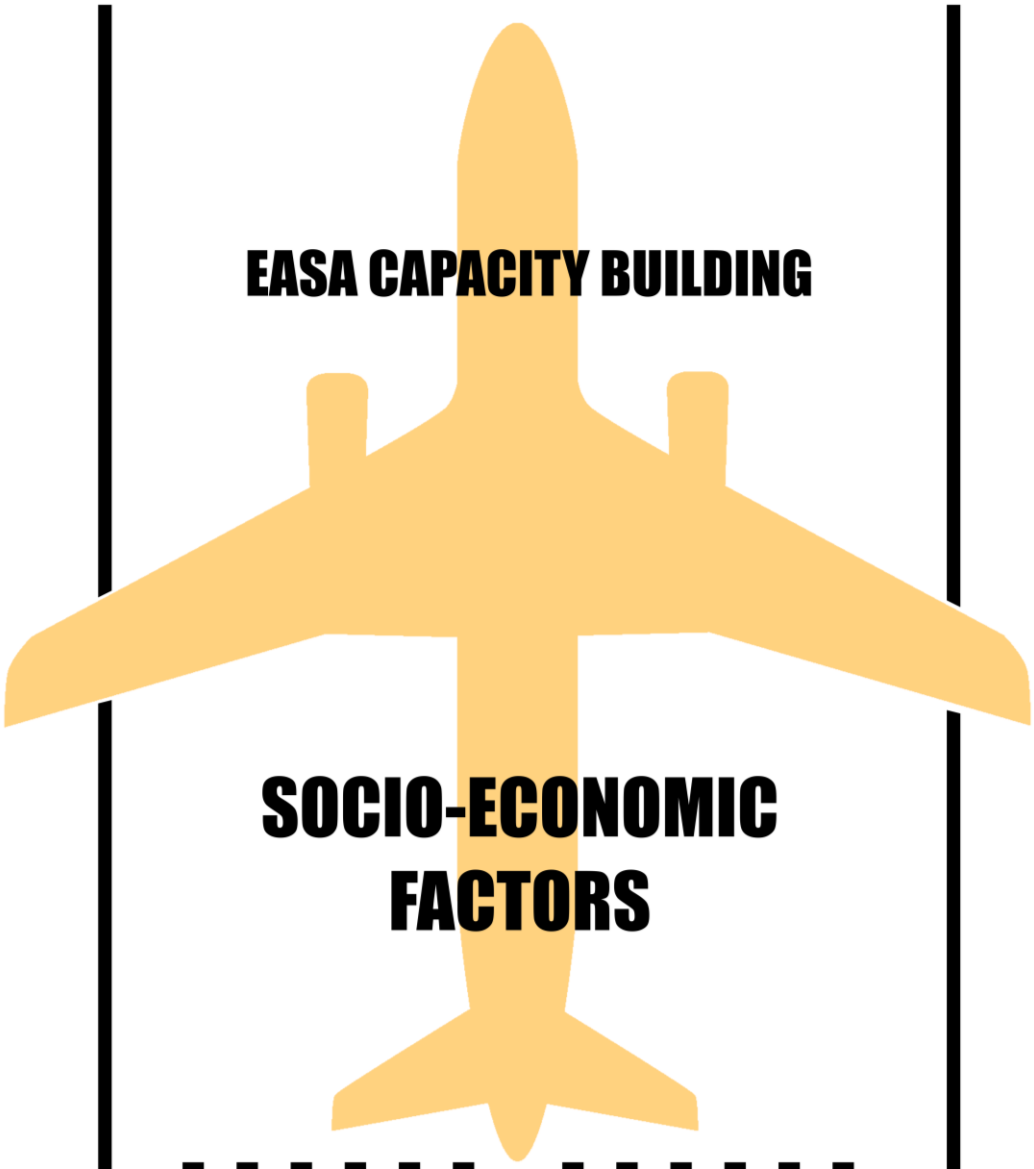
EUROPEAN TRANSPORT WORKERS' FEDERATION

EASA CAPACITY BUILDING



SOCIO-ECONOMIC FACTORS

With the support of the European Commission

EUROPEAN TRANSPORT WORKERS' FEDERATION

The text in this document is provisional due to the transition phase between Regulation (EC) No 216/2008 – Basic Regulation pre September 2018 and Regulation (EC) No 2018/1139 – New Basic Regulation post September 2018. The information contained within this document has been sourced from current information available and is being regularly updated during this transition phase.

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Brussels, 10 December 2018

ETF approach to deal with the socio-economic factors inside the EASA

Based on discussions held in the ASPReT (ATM Social Partners Regulatory Taskforce established under ATM Social Dialogue Working Group) with relevant EASA experts, ETF experts participating in ASPReT have drafted most of the following proposal for setting up the implementation of the new basic regulation.

1. Relevant extracts from the new Basic Regulation (EU Reg 2018/1139) :

(68) When the Agency develops draft rules of a general nature to be implemented by national authorities, Member States should be consulted. Furthermore, where rules could have important social implications, stakeholders, including Union social partners, should be appropriately consulted when the Agency prepares corresponding draft rules.

Article 89 Interdependencies between civil aviation safety and socio-economic factors

1. The Commission, the Agency and other Union institutions bodies, offices and agencies and the Member States, shall, within their respective fields of competence, cooperate with a view to ensuring that interdependencies between civil aviation safety and related socio-economic factors are taken into account including in regulatory procedures, oversight and implementation of just culture as defined in Article 2 of Regulation (EU) No 376/2014, to address socio-economic risks to aviation safety.

2. The Agency shall consult relevant stakeholders when addressing such interdependencies.

3. The Agency shall, every three years, publish a review, which shall give an objective account of the actions and measures undertaken, in particular those addressing the interdependencies between civil aviation safety and socio-economic factors.

Article 115 Procedures for the development of opinions, certification and other detailed specifications, acceptable means of compliance and guidance material

2. When the Agency, pursuant to Article 76(1) and (3), develops opinions, certification and other detailed specifications, acceptable means of compliance and guidance material, it shall establish a procedure for the prior consultation of the Member States. To that effect, it may create a working group in which each Member State is entitled to designate an expert. When consultation relating to military aspects is required, the Agency shall, in addition to Member States, consult the European Defence Agency and

other competent military experts designated by the Member States. When consultation relating to the possible social impact of those measures of the Agency is required, the Agency shall involve the Union social partners and other relevant stakeholders.

2. Proposed setup

Foreword: The existing advisory body structure of EASA is not designed to tackle social issues nor is it part of its mandate. So there is a need of a dedicated setup to cater for the new requirements of the EU Reg 2018/1139.

a. Consultation of EU social partners

Each recognized EU social partner shall be consulted when the agency planned to develop opinions, certification and other detailed specifications, acceptable means of compliance and guidance material which may have social impact of those measures. This consultation is without prejudice to the consultation of the Social Dialogue Committee for Civil Aviation. Indeed, the agency's final decision whether or not to integrate a potential social impact cannot be taken solely on the basis of the existence of a consensus between the social partners, since differences of opinions may exist between them.

b. Aviation wide

We propose to hold a yearly meeting between EASA and the entities represented in the Aviation Social Dialogue Group as organized by the European Commission DG EMPL.
The tasks to be performed during this meeting:

- preparation and pre-publication review of the document published every three years in accordance with Article 89 (3).
- Reports of sub-sector activities.
- Discussion of cross sub-sector issues to find dedicated arrangements to tackle those relevantly.
- Update as needed of the setup to tackle social issues under EASA Basic Regulation, especially focusing on improvements to help EASA find ways to scale social impact leading to reduced burden on the social partners.
- Presentation of EPAS as well as subjects envisaged to be included in EPAS to allow evaluation of potential social implications by the participants.
- Discussion on implementation of emerging issues (eg. drones, automation, cybersecurity, ...)

c. Sub-sector wide (eg. Aircrew, Ground Handling, ATM)

This part of the proposal is based on the experience in the field of air traffic management where social partners collaborate on regulatory issues in a taskforce (ASPReT) seating under the ATM social dialogue working group run by DG EMPL.
We propose to hold a meeting every year. The tasks to be performed during this yearly meeting:

- Social Partners to indicate those tasks where they assessed potential social impacts affecting safety including tasks which are not yet included in the EPAS but for which EASA indicated intention to have a PIA before next EPAS.
- Discussion on arrangements to be found for social partners to be associated in the follow-up of social impacts for the tasks identified in previous agenda item.

- Feedback on the activities conducted and ways to scale social impact to simplify the process.

For ATM, as agreed by the ATM social partners, this should be covered via a dedicated meeting of ASPReT in presence of (or hosted by) EASA.

d. Task specific activities

For the tasks identified as having potential social impact affecting safety different level of involvement can be envisaged :

1. EASA to draft PIA and interested organisations to review social impacts before publication of PIA
2. Interested organisations to nominate experts to help EASA drafting the PIA. Potentially using the independent expert mechanism to allow availability.
3. If the task is run under a rulemaking group, interested organisations shall be able to nominate a member of the rulemaking group. Ad-hoc meetings shall be conducted to check that social impacts are kept to an acceptable level in the draft rules. A dedicated meeting for experts to help inform the drafting of the explanatory note regarding social impact shall be organised. Potentially using the independent expert mechanism to allow availability.
4. If the task is not run under a rulemaking group (also applicable as needed for none rulemaking tasks), set up an ad-hoc meeting potentially using the independent expert mechanism to allow availability with interested experts to assess the social implications of the proposal informing the drafting of the explanatory note as needed.

Methodological Impact Assessment Support on Social Impacts and Circular Economy Indicators

Draft final report Task 1

Client: European Aviation Safety Agency - EASA

Wim Spit, Saraï Sapulete, Nils Verkennis

Rotterdam, 21 June 2019

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1 Introduction

The aviation sector is a strategically important sector that makes an essential contribution to the EU's overall economy and employment, as it supports close to 5 million jobs and contributes €300 billion, or 2.1% to European GDP. Since the progressive implementation of the single aviation market began in 1992, developments such as new airline business models, wider choice of air services, mergers of airliners etc., have had a non-negligible impact on jobs and working conditions, in a context of increasing productivity and recourse to outsourcing.

To analyse employment and working conditions in the aviation sector, the European Commission has conducted studies in this area on a regular basis. First, in 2008, the European Commission conducted a survey analysing employment and working conditions within the internal market for aviation over the period 1997-2007. This study was updated in 2012 ("Study on the effects of the implementation of the EU aviation common market on employment and working conditions in the Air Transport Sector over the period 1997/2010") and in 2015 ("Study on employment and working conditions in air transport and airports"). It mainly focused on employment and working conditions developments of the aviation sector.

Several other evaluations and (regulatory) impact assessment studies have been conducted in recent years by the European Commission and by EASA. These studies[1] identify, among others, social impacts and their causality chains that can be relevant to this study.

EASA has requested Ecorys to assist in updating the existing methodology for assessing social impacts. According to the explanation in the 'Specific Technical Specifications' of the tender documents, the overall objective of the request for services is to: *Develop a social impact assessment methodology that results in a single value summarising the overall social impact, built on several social indicators, in order to be integrated in impact assessment performed according the Multi Criteria Analysis methodology.*

This document presents the draft final report of the study to provide "Methodological Impact Assessment Support on Social Impacts Indicators". In this draft final report, the social impacts assessment framework is presented following stakeholder consultation and literature review.

- Chapter 2 presents a synopsis of the multi criteria analysis as general methodology for the impact assessment and a summary of this study's methodology;
- Chapter 3 provides an analysis of the information collected before combining them into the social impact assessment framework;
- Chapter 4 presents the assessment framework;
- Annex I presents a detailed description of the methodology of this study;
- Annex II provides the literature that has been consulted;
- Annex III gives an overview of the stakeholder interviews conducted;
- Annex IV introduces the interview questionnaire used;
- Annex V comprises the interview reports.

[1] E.g. EC (2017), Impact Assessment for a possible revision of Directive 2006/1/EC; EC (2017), Study to support the impact assessment for the revision of Regulation (EC) No 1071/2009 and Regulation (EC) No1072/2009.

2 Multi-Criteria Analysis (MCA)

2.1 General methodological principles

The final output of our study is an expansion of the Multi-Criteria Analysis (MCA) methodology used by EASA to include a methodological approach to assess social impacts. The expansion fits in with the methodological framework already in use by EASA for assessing safety, economic and environmental impacts. In line with the existing framework, this methodology needs to result in **a single value output** for the impact on social aspects.

Conducting an MCA helps decision makers to compare a range of options based on measurable impacts, to facilitate decision making on the preferred option. The impacts may be measured quantitatively and/or qualitatively.

MCA is often used when impacts cannot easily be monetised, prohibiting a comparison in terms of a cost-benefit analysis (CBA). Conducting an MCA has some advantages and disadvantages that are summarised in Table 2.1 below.

Table 2.1: Advantages and disadvantages of MCA

Advantages	Disadvantages
• Recognises multi-dimensionality of options; • Allows different types of data (monetary, quantitative, qualitative) to be compared and analysed in the same framework with varying degrees of certainty; • Provides a transparent presentation of the key issues at stake and allows trade-offs to be outlined clearly; contrary to other approaches such as cost-benefit analysis, it does not allow implicit weighting; • Enables distributional issues and trade-offs to be highlighted.	• Difficulty to establish a scale to measure a criterion; • Elements of subjectivity, especially in the weighting stage where the analyst needs to assign relative importance to the criteria; • Because of the mix of different types of data, cannot always show whether benefits outweigh costs; • Time preferences may not always be reflected; • When there are criteria to assess the impacts, which are linked (like social / economic / proportionality), double-counting of the impact of an option may not be prevented; • While it would be possible to compare the CBA results of different studies (providing that key elements are comparable like appraisal period, discount factor ...), this is nearly impossible for MCA results across different studies due to the selection of criteria which could be specific for each study. In the case these criteria are equivalent, the scales used to support the score of a criterion could also be specific to each study.

Source: EASA (2017), Qualitative based assessment Multicriteria Analysis

There are a number of steps to be taken when conducting an MCA.[2]

1. **Describe baseline scenario.**

[2] EASA (2017), Qualitative based assessment Multicriteria Analysis.

The baseline scenario should be described, and the options of introducing different scenarios, of which the impacts need to be assessed;

2. **Specify criteria and indicators to be used to compare the options.**
   These are criteria such as safety, environment, social and economic;
3. **Specify scales for each criterion.**
   A scale measures the level of significance of the impact of an option in relation with a criterion;
4. **Determine a score for each option indicating how well it meets a given criterion according to the objective(s).**
   The score is the sum of the separate scores established per criterion;
5. **Assign weights for each criterion indicating their relative importance.**
   Setting weights is optional. Weights can be all set to one when the criteria a viewed as being of equal importance. In case weights are assigned, there should be a strong justification of the reasons why;
6. **Combine the weights and the scores for each option to derive an overall value.**
   Only in case of step five being applied;
7. **Rank the options according to the overall values;**
8. **Examine the results;**
9. **Conduct sensitivity analysis.**

The MCA should be applied considering the whole of the aviation sector, providing one single figure for the social impact of an option on the aviation sector. However, impacts may play out differently in different sub-sectors or for different stakeholders. Therefore, in case the methodology applicant considers that the impacts may be considerably imbalanced, separate focused assessments need to be performed at the level of sub-sector, stakeholder group, geographical area etc. Where relevant, Ecorys has mentioned this in the developed framework.

2.2 Shortcomings of the MCA

Scaling of the impacts may be a challenging exercise, especially when impacts can only be assessed qualitatively. As an example, the following guidance to assign significance to impacts is currently used by EASA:

> **NOTE ON THE CRITERIA USED TO IDENTIFY THE IMPACT OF THE CHANGE**
>
> Non-significant impact is identified when the change:
>
> - is expected to have negligible impact on the affected stakeholders, their functional systems,
> - procedures or personnel;
> - addresses issues of non-controversial nature; and
> - affects a limited group of stakeholders
>
> Minor impact is identified when the change
>
> - is expected to have minor impact on the affected stakeholders, their functional system, procedures or personnel requiring therefore a focussed consultation. The change can be integrated smoothly with an adequate transition period.
>
> Major impact is identified when the change
>
> - is expected to significantly affect stakeholders, requiring them to change their procedures, manuals and which may imply extra costs or investment. These potential negative impacts need to be counterbalanced by an assessment of the potential benefits.

2.3 Scope of the assessment

In principal, the impact assessment covers all relevant sub-sectors of aviation together. However, in some cases options for regulation by EASA are expected to relate to only a few sub-sectors and within these sectors to only a few specific stakeholder groups. Before the impact assessment can be carried out, the scope of the regulation, and thus of the impact assessment needs to be assessed. In this scoping exercise, the relevant width of the assessment needs to be clarified. The outcome can be either that given the subject of the proposed regulation the impact assessment should cover all relevant aviation sectors and stakeholder groups, or that a more restricted scope would be sufficient.

In case a more narrow scope is deemed applicable, several of the following sub-sectors (and stakeholder groups) of aviation could be involved:

- Air transport operations (pilots, crew);
- Air navigation services (air traffic safety electronics personnel - ATSEP, air traffic controllers - ATCOs);
- Airport services (security, ground handling staff);
- Aircraft manufacturers;
- Aircraft maintenance services;
- National aviation authorities;
- EASA.

In this respect, it needs to be mentioned that the stakeholder groups that have been contacted for this study are mainly relating to the first three sub-sectors mentioned above. The outcome of the study may thus need to be validated additionally with representatives from the other sectors.

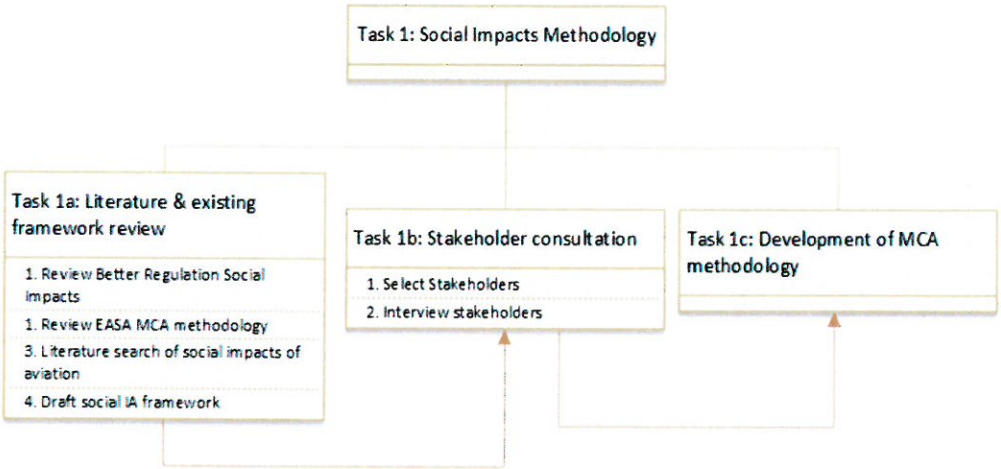
2.4 Methodology

This study comprised three tasks[3]:

- Task 1a – Literature & existing framework review;
- Task 1b – Stakeholder consultation;
- Task 1c – Methodology for social impacts development.

The figure below provides a schematic representation of these tasks.

[3] Annex I provides a more detailed description of the study methodology.



2.4.1 *Task 1a – Literature & existing framework review*

The aim of this task is twofold. First various methodologies have been assessed which could satisfy the objective of EASA to derive one single score that captures a variety of social impacts. Secondly, Ecorys reviewed the available sources in literature to come up with a framework of indicators that gives coverage of all impacts that are deemed important when describing social impacts.

Methodologies

In comparing alternative proposals on their impacts, EASA distinguished various categories, such as safety impacts, economic impacts and social impacts. The aim of the impact assessment is to describe the full picture of impacts for each proposal, as well as to come to an overall final assessment of the differences in impact of these proposals. The final assessment is to be reflected in a single score for each proposal.

Coming to a single score for a group of impacts means that one denominator is needed for impacts that may be quite varied in character, type, relevance, etc. In literature, two methodologies can be found that enable the user to compare proposals using one single score: societal cost-benefit analysis and multi criteria analysis (MCA).

In societal cost benefit analysis (SCBA) impacts of a proposal are translated as much as possible into one monetary value, which expresses the effect the proposal has on society's welfare. The use of the instrument requires not only that the size of impacts is assessed ("the quantity"), but also that the size of the impacts is subsequently expressed in monetary values using a unit value ("price"). However, such unit values are not always readily available for all types of impacts, which can result in uneven treatment: those impacts for which no monetary valuation is possible might require less attention in a SCBA than impacts for which unit values are readily available. Moreover, the valuation in SCBA has a welfare economic perspective, which restricts the possibility to include types of impacts; only impacts that do affect welfare are to be taken into account.

The requirements for a SCBA are thus quite elaborate and are not easy to fulfil. Moreover, SCBAs are frequently criticised as they are not seen to fully reflect the impacts that a proposal may have, either because unit values are not available, or because those impacts that do not have an effect on welfare are not taken into account, even though they may be deemed relevant.
An MCA gives more possibilities in this respect, as the methodology in itself poses no restrictions: all impacts (criteria) that are deemed relevant can be taken into account. Moreover, while in SCBA

methodology strict rules apply with respect to the comparative valuation of impacts (using market of shadow prices), in case of an MCA the scales be standardise (e.g. all ranging from 0 to 1). In this way all impacts that are deemed largest can have an equal score (e.g. 1) irrespective of the individual monetary value of those impacts (if known). In a second step, the relative importance of types of impacts can be used to apply weights to the individual impacts, in order to arrive at a single score.

The review of the two methodologies that can be used to compare various options shows that an MCA is more flexible as to the types of impacts that can be taken into account. In addition, an MCA requires less information on values than an SCBA. In conclusion, MCA is deemed more suitable than SCBA for EASA's purpose.

Frameworks for social impacts

The goal of this task is to take stock of the existing methodological framework for social impact methodologies and develop a draft set of social criteria and indicators to assess them to be introduced to the MCA methodology. Since EASA had already been working with ASPReT to adjust the EASA social impact assessment methodology, and specifically for the screening of impact categories, Ecorys has reviewed the long-list of impact categories provided in the Better Regulation Toolbox crosschecking the rationale behind the selection provided in the *Specific Technical Specifications* document. The preliminary social impact assessment framework has served as input for the stakeholder interviews.

As Ecorys received new documentation following the stakeholder interviews, the literature review was considered an open-ended task as the social impact assessment framework has been continuously updated with these new insights. Annex I provides a literature list.

2.4.2 *Task 1b – Stakeholder consultation*

The goal of this task is to validate and finalise the draft social impacts framework by consulting with the aviation social partners and other stakeholders that are knowledgeable of the topic. At the same time, the interviews were used to gain insights on the stakeholders' views of the relative importance of the different impact categories.

Step 1: Preparation and stakeholder selection

In consultation with EASA, a list of specific stakeholders has been prepared including known contact points for each. EASA has pointed alternative contacts points where available. This resulted in the following list of aviation social partners:

- ACI-Europe;
- CANSO;
- AIRE;
- ECA;
- ESAM;[4]
- ATCEUC;
- ETF;
- ERAA;
- ASA;
- A4E.

[4] Although ESAM is not a social partner, it was considered useful given their role in the field of aerospace safety and health to take their views into account in this study.

Apart from one stakeholder (A4E), all stakeholders responded to our invitation and agreed upon a date for an interview (table 2.2).

Table 2.2: Stakeholder consultation overview

	Organisation	Meeting date	Time	First approach	Questionnaire sent on
1	ACI-Europe	21-2-2019	10.00-11.00	18-1-2019	8-2-2019
2	CANSO	21-2-2019	16.00-17.00	18-12-2018	4-2-2019
3	AIRE	25-2-2019	10.00-11.00	18-1-2019	5-2-2019
4	ECA	25-2-2019	14.00-15.00	18-1-2019	4-2-2019
5	ESAM	25-2-2019	15.00-16.00	18-1-2019	4-2-2019
6	ATCEUC	26-2-2019	12.00-13.00	18-12-2018	4-2-2019
7	ETF	26-2-2019	13.00-14.00	18-12-2018	4-2-2019
8	ERAA	08-3-2019	11.30-12.30	18-1-2019	5-2-2019
9	ASA	22-3-2019	10.00-11.00	18-1-2019	11-3-2019[5]

To be well prepared for the interviews, Ecorys scheduled a conference call on January 15h with representatives of ASPReT. In this call, EASA first elaborated on the aims of the study, after which ASPReT and ECORYS exchanged thoughts on the preliminary social impacts list. ASPReT underscored the importance to reflect on the work that has already been conducted in the past year(s) by EASA and ASPReT. It was recommended to Ecorys that criteria should cover both the positive as well as the negative side (e.g. the impact on employment should cover both job creation as well as job loss).

ASPReT members also indicated the importance of distinguishing between human and social factors, with this social impact assessment methodology focusing on the social criteria. Ecorys considered the suggestions when adjusting the approach and preliminary framework.

Lastly, ASPReT invited Ecorys to participate in the ASPReT meeting on March 6th to summarise and confirm findings from the stakeholder interviews with individual ASPReT members and further discuss the social impacts assessment methodology (step 3).

Step 2: Stakeholder interviews (mid-February)

During the stakeholder interviews, the respondents have been consulted to confirm and expand our initial selection of the relevant impact types for aviation and test the suitability or suggest alternative potential criteria for the social impacts. In Annex II, Ecorys provided a summary of the conducted interviews with the main outcomes per interview. In Annex III, Ecorys provided the questionnaire that was used for the interviews and in Annex IV the interview reports and meeting minutes.

Step 3: Follow-up workshop with ASPReT (March)

On March 6th, ECORYS participated in a workshop with ASPReT members in Brussels to further discuss on the social impact assessment methodology. During this meeting, ASPReT reflected on the list of criteria and possible indicators were discussed with Ecorys. This resulted in an amended list of indicators.

Step 4: Validation session (12 April)

To ensure credibility and usability of the impact assessment indicators, Ecorys explored the completeness and acceptability of the developed impact assessment framework in a validation

[5] There were a few weeks delay in the response of ASA to our first approach, therefore it took us longer to agree on an interview.

session with the aviation social partners and ESAM. The aim of this session was to verify the final social impact methodology and especially the scales and weighing factors used for the different criteria proposed. The workshop minutes are included in Annex VI of this report.

2.4.3 *Task 1c – Methodology for social impacts development*

Based on the first two steps a framework has been developed for assessing social impacts. This framework is based on the inputs from stakeholders, the literature review and Ecorys' assessment of the suitability of various indicators to reflect the relevant criteria.

2.5 Stakeholders views

As described above, the stakeholder interaction has been an important element in the development of this assessment framework. Throughout the process, stakeholders have been very collaborative, but they have also been critical on the work performed. Their criticism relates both to the idea itself to capture a variety of social impacts in one overall score, as well as to the process followed in developing the framework. Below we summarize the main points raised by stakeholders during the process.

- Generally, the consulted stakeholders disagreed with the proposed MCA method as being most suitable instrument to assess risks of social impacts, for several reasons. Stakeholders expected that the study would have followed a more scientific approach, in particular on how to measure social impacts and then adjusted to the aviation context. They expressed concerns as the methodology reduces the social impact assessment to "one score", e.g. by indicating that the aviation sector is extremely varied to resume in one single value. Second, some stakeholders argue that social impacts are subjective by nature, which complicates the single value derivation.

Ecorys reaction to this criticism:

- Ecorys agreed with EASA on a practical way of working, starting with the work by EASA and ASPreT based on the Better Regulation Toolbox as provided in the contract specifications. Based on this groundwork, further elaboration has taken place in terms of development of indicators and scores, which have been based on available (scientific) literature. This approach was agreed to be most suitable to EASA's needs;
- With respect to the MCA instrument, it is Ecorys' view that such an instrument is most suitable in case one wants to come to one single score. See section 2.4.1. It is noted that stakeholders did not propose alternative methodologies, but stressed the need for risk assessment and monitoring;
- Ecorys would like to emphasize that an impact assessment is only one instrument to assess the expected impacts before a decisions is taken on rule making. Once rules are in place, monitoring of the effects and evaluation of the rules are highly recommendable. The design of instruments for monitoring or evaluation is, however, outside the scope of the present study;
- It is not up to Ecorys to judge whether one score for social impacts is desirable. However, the criticism has been taken into account in that the methodology allows having both a single score, which can be broken-down per aviation sector (fixed wing, helicopter…) or per staff professions (pilots, ATCO, maintenance…). This level of details will allow transparency to compare the social impacts at aviation sector or stakeholder level.

- Ecorys drafted a list of stakeholders in consultation with EASA, focusing on the aviation social partners. Stakeholders rightly observed an underrepresentation of stakeholders from certain

parts of the aviation sector (e.g. manufacturing, maintenance). Ecorys reaction: It is recommended to include additional stakeholders in further elaboration of this methodology;

- Generally, stakeholders are of the opinion that the proposed framework should be used with extreme care. For instance, the scoping of applicable social criteria, relevant aviation sub-sectors and relevant indicators is very important; moreover, the application to different sub-sectors may lead to a variety of scores on one specific criterion. These scores give a better picture than trying to come to one score per criterion, let alone one score for all social impacts together;

  Ecorys reaction: Ecorys agrees that this methodology has to be carefully implemented and to be further consolidated based on real cases. A such the methodology is flexible and allows for selection of the most appropriate impacts, most relevant indicators and the relevant (sub)sectors of aviation for a given impact assessment;
- Various stakeholders noted that all listed impacts and indicators are potentially relevant. Any hierarchy between indicators or criteria, by applying different weights, would be simplifying issues and therefore give a false impression.

  Ecorys' reaction: It is noted that stakeholders are reluctant to differentiate. However, if put to the test some impacts are likely to be viewed to be more important than others. Therefore, the instrument allows the user to differentiate in the weighing. Ecorys do not prescribe the weighing;
- Stakeholders expressed doubt whether measuring of some of the indicators would be possible, for instance due to lack of relevant data and/or reluctance of companies to share their data.

  Ecorys reaction: indeed, it is not always possible to measure the indicators in a quantitative way. Further work will be required in order to enable indicators to be used, such as baseline studies, collection of data, etc.
- Stakeholders expressed the need for risk analysis of social aspects, and continuous monitoring of social impacts. These activities are deemed as least as relevant as an ex ante evaluation.

  Ecorys reaction: As described Ecorys agrees that ex ante impact assessment is only one step in the policy cycle. It is recommended that EASA develops additional tools and procedures to assess risks associated with social impacts, as well as tools to monitor and evaluate impacts of rulemaking.

3 Social impacts

In this chapter we describe the criteria and indicators that Ecorys has identified to be relevant to include in the social impact assessments through the MCA. First, we present the criteria and our proposal to weight the criteria according to their relative importance in section 3.1. Second, we present the indicators that are used to measure the criteria in section 3.2. Ecorys also proposes a weight for the indicators and a suggested scale.

3.1 Social impact criteria

3.1.1 Deriving the long list of criteria

We have used the lists of impacts from the EASA RIA guide and the Better Regulation Toolbox as the basis for developing the social impact framework. A preliminary list was derived from these two sources. Section 3.2 describes the criteria and indicators in more detail.

The initial list of indicators has been discussed with various stakeholder groups in several rounds of bilateral interviews and group interviews. This gave stakeholders the opportunity to react to new criteria suggested by others. Criteria that were deemed less relevant by many stakeholders were dropped, while other were added.

Following these rounds of discussion, the following long list of the most relevant impacts (criteria) has been derived. The list was validated in a workshop with six representatives of stakeholder groups present alongside the relevant criteria identified. The selected criteria are grouped according to the categories used in the Better Regulation Toolbox.

Table 3.1 shows the impacts that EASA-ASPReT preliminary selected based on the Better Regulation Toolbox and the criteria finally identified in the Ecorys framework, respectively. Per criterion, Ecorys has identified indicators, which are presented in detail in Section Table 3.1. For a number of criteria, more than one indicator has been included.

Table 3.1: Social impacts and criteria

EASA – ASPReT (based on Better Regulation Toolbox[6])	Ecorys social impact criteria after stakeholder consultation
Employment and labour markets	**Employment and labour markets**
To what extent are new jobs created or lost?	Effect on total employment
To what extent does the regulation influence the mobility?	Effect on turnover of workers
Working Conditions	**Working conditions**
Does the regulation affect wages or wage setting mechanisms or labour costs?	Effect on wages, wage setting mechanisms or labour costs
Does the regulation affect work organisation?	Effect on employment protection
Does the regulation affect occupational health and safety, working conditions or the effective exercise of labour standards?	Effect on work organisation
Does the regulation affect social dialogue?	Effect on the exercise of labour standards

[6] As stated in the *Specific Technical Specifications (Part II Annex III of the tender).*

EASA – ASPReT (based on Better Regulation Toolbox[6])	Ecorys social impact criteria after stakeholder consultation
Does the regulation affect access to vocational training and career development advice?	Effect on access to vocational training and /or advice on career development
	Effect on occupational health and safety
	Effect on social dialogue
	Effect on 'just culture'
Governance, participation and good administration	**Governance, participation and good administration**
Does it affect the autonomy of the social partners in the areas for which they are competent? Does it, for example, affect the right of collective bargaining at any level or the right to take collective action?	Effect on the autonomy of social partners in the areas for which they are competent (e.g. the right of collective bargaining, the right to take collective action)
Does the option make the public better informed about a particular issue? Does it affect the public's access to information?	Effects on information and consultation rights
Access to and effects on social protection, health and educational systems	**Access to and effects on social protection, health and educational systems**
Does the option affect the access of individuals to public/private education or vocational and continuing training?	Effect on the level of education
Does the option affect the level of education and training outcomes?	Effect on the mobility of workers
Does it have an effect on the education and mobility of workers (health, education, etc.)?	
Does the option have an impact on services in terms of quality/access all?	
Public health and safety	**Public health & safety**
Does the option affect lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs?	Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs
Are there specific effects on particular risk groups (determined by age, gender, disability, social group, mobility, region, etc.)?	Effect on position of specific groups of workers

3.1.2 Weighing social impact criteria

The relevance of a criterion depends on the type of regulation being assessed. This implies that not all criteria are expected to be equally relevant for all impact assessment exercises. The relevance of criteria needs to be assessed with a scoping exercise each time. The baseline scenario and the scoping of the employee categories relevant for each assessment should be defined in specific for the Regulation at hand. In every assessment, the focus should be adjusted to the group of affected stakeholders.

Irrespective of their relevance given the contents of the proposed regulation, the importance of each of the criteria when assessing 'social impacts' may also vary. Although most stakeholder representatives appeared to be reluctant to assess criteria as being less important, a certain hierarchy of importance may be expected, income or employment generally being valued more important than e.g. access to training.

To gain insight in the perceived importance of criteria among stakeholders, ECORYS circulated a brief survey (Annex IV) in which stakeholders were to score the criteria in terms of importance (0 = not important, 1 = little importance, 2 = average importance, 3 = high importance), based on their subjective expert opinion. Representatives of ACI-Europe, ASA, ECA, ESAM and ETF filled in the survey, and the results were discussed during the validation workshop that followed. Whereas it was acknowledged that the basis for the ranking is limited, with only five responses, the grouping of indicators as a result of the survey was generally shared by all stakeholders.
The following list can be used as a starting point.

Table 3.2: Indicative ranking of criteria according to level of importance based on a limited number of stakeholder inputs*

Higher importance	Medium importance	Lower importance
1. Effect on total employment	9. Effect on social dialogue	7. Effect on access to vocational training and /or advice on career development
2. Effect on turnover of workers	10. Effect on 'just culture'	12. Effects on information and consultation rights
3. Effect on wages, wage setting mechanisms or labour costs	11. Effect on the autonomy of social partners in the areas for which they are competent (e.g. the right of collective bargaining, the right to take collective action)	13. Effect on the level of education
4. Effect on employment protection		15. Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs
5. Effect on work organisation		16. Effect on position of specific groups of works
6. Effect on the exercise of labour standards		
8. Effect on occupational health and safety		
14. Effect on the mobility of workers		

* The relative importance of criteria should be reviewed per impact assessment. This indicative list presents suggested values, and follows from stakeholder consultations through a survey with limited response, and the stakeholder validation workshop.

Given differences in the level of importance, different weights may be assigned to the criteria. Based on the outcome of the surveys the suggested relative weights would be:

- 4 for criteria with high importance,
- 3 for criteria with medium importance; and
- 2 for criteria with low importance.

These weights best reflect the views of stakeholders on the importance of the categories combined with the importance of the individual criteria.

For reasons of transparency, the study team decided to use a uniform 5-points scale throughout the instrument, for all weights and scores. This type of weighing implies that a criterion with high importance is assigned a weight that is double the weight assigned to an indicator with low importance. Other types of weighing are, of course, also conceivable with more differentiation in the

level of importance (e.g. 3, 2, and 1). However, as indicated, such a higher level of differentiation cannot be based on the views of stakeholders.

3.2 Social impact indicators

A list of indicators has been developed, which can be used to assess social impacts for the above-mentioned criteria. In former impact assessments, oftentimes qualitative scales have been used to assess social impacts[7]. Where possible, quantitative scales have been developed to support the assessment of the measurements of the indicators. However, this is not possible in all cases, and in some cases, it may also leave room for interpretation. Furthermore, impacts may have different, and even contradicting, effects for different groups. Also, because of different institutional settings per country, social impacts may likely differ between countries as well[8]. The context in which indicators are measured should therefore be made clear before starting the assessment.

It has been recognised during the stakeholder workshop that these indicators serve as a starting point and should be further detailed during their implementation in impact assessments of new EASA rulemaking activities.

The indicators described below may not be all relevant at the stage of an impact assessment because the evidences for ex-ante assessment could be very hard to find. However, such indicators could provide interesting insights either during the monitoring of socio-economic risks (new responsibility for EASA[9]) or at the stage of evaluation (i.e. ex-post assessment). For each indicator, we indicates whether this is relevant for ex-ante or ex-post assessment.

The list of indicators considered in this section is presented in Table 3.3 below:

Table 3.3: List of indicators

Employment and labour markets
1A. Change in number of employees
1B. Change in ratio FTE / employee
2A. Degree to which function levels change due to change in tasks of function (% of jobs affected)
2B. Change in employee turnover rate (% of employees leaving the firm / total employment)
Working conditions
3A. Change in net income per FTE
3B. Change in maximum retirement age
4A. Change in percentage of employees on atypical ('flexible') contracts
5A. Change in average number of hours worked
5B. Change in workload
6A. Change in use of non-national labour contracts
7A. Change in % of workers receiving vocational training / career development advice
8A. Change in number of work-related safety incidents
8B. Change in absence rate due to sickness
8C. Change in occurrence of "provisional inability"

7 E.g. EASA (2010), Notice of proposed amendmend. Implementing Rules on Flight and Duty Time Limitations and rest requirements for commercial air transport (CAT) with aeroplanes'; EASA (2014), Notice of proposed amendmend. Carriage of Special Category Passengers; EASA (2015), HETA. Report on Harmonised European Transition Altitude.

8 Ecorys (2009), Assessing the Employment and Social Impacts of Selected Strategic Commission Policies.

9 EASA (2018). REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, Article 89.

9A. Change in union representation
10A. Change in likelihood of occurrences being reported
10B. Change in likelihood of actions following the reporting of just-culture
10C. Change in level of privacy protection
Governance, participation and good administration
11A. Change in existence of social impact mitigation system (similar to safety management system)
11B. Change in the rights of unions to organise actions (e.g. strikes)
12A. Change in the level of right of information and/or consultation in organisations, companies
Access to and effects on social protection, health and educational systems
13A. Change in education level requirements for functions
14A. % of workers for which principal place of employment changes within country / administrative region
14B. % of workers for which principal country/administrative region of employment changes
14C. Change in cross-border mobility within EU
Public health & safety
15A. Change in use of support programmes to combat addictions (alcohol, drugs other)
16A. Change in access to jobs for specific groups of workers groups (disability; gender; age).

Reading guide

In the following subsections, the proposed indicators and their scales are presented per criterion. For each of the indicator(s) the following are described. First, a definition of the indicator is provided. Second, where relevant, the possible variations per sector are indicated. Third, the proposed scaling per indicator is discussed. Furthermore, we recommend whether this indicator is mainly relevant for either the impact assessment or the monitoring phase. If a quantitative scaling is proposed, a table is presented consisting of a qualitative description, a score and the accompanying quantitative impact:

Qualitative description	Score	Quantitative impact
Very high positive impact – Very high negative impact	+5 – -5	+X% – -X%

When conducting a Regulatory Impact Assessment (RIA), this table should be completed with additional columns for each relevant stakeholder to identify the impact per stakeholder (following the EASA RIA user guide on economic impacts[10]).

Qualitative description	Score	Quantitative impact	EASA	NAA	ATM/ ANSP	Airlines
		Baseline figures				
Very high positive impact – Very high negative impact	+10 – -10	+X% – -X%				

3.2.1 *Employment and labour markets*

According to the Better Regulation Toolbox[11], impacts on the level of employment can be expected "*whenever demand or supply of a product changes or where relative prices change (e.g. between*

[10] EASA (2016). RIA user guide.

[11] EC (2017), Better Regulation Toolbox, p.181.

different producers)". This could then result in more or less jobs or more or less hours worked, which gives an indication whether a larger or smaller workforce will be needed and/or whether redistribution of labour is to be expected. As such, the main criteria for this impact are the effect on employment levels and the effect on the turnover of workers.

Below, the criteria for this social impact category are proposed, as well as some specific points of attention that we received during the stakeholder interviews.

Indicators

1. Effect on employment levels in total

The effect on total employment can be measured by taking into account the change in number of full-time equivalents (fte).

1A. Change in number of employees

Definition

A full-time equivalent (fte) measures employed persons in a way that makes them comparable even if they work a different number of hours per week[12]. Employment can be expressed in terms of added up fte as well as number of people employed, for example per country or per sector. In this report, we follow other studies' definition on employment and report on the number of employees.

Table 3.4 presents the employment change in the EU from 2002 until 2017. An increase can be seen until 2007, a decrease between 2007 and 2013, and an increase again after 2013. Comparing to the aviation performance, we can see employment decreasing at a faster rate than for the EU in average. No figures were available for after 2013, but based on the identified trend a performance under that of the EU average is expected.

Table 3.4: Employment* change in EU total and aviation EU

	Total EU	Aviation EU
2002-2007	4,5%	-1,4%
2007-2013	-2,0%	-5,7%
2013-2017	5,6%	

* Number of persons

Source: Eurostat employment statistics, Steer Davies Gleave (2015), calculations by ECORYS.

Variations

The indicator firstly looks at employment in the aviation sector as a whole. However, employment changes for the aviation sector may differ largely between sub-sectors as well as between Member States. For example, there is substantial variation for this indicator between Member States; employment in aviation is much larger in the UK, France and Germany than in other Member States[13].

Furthermore, there may be differences between sectors. For example, due to long education and training trajectories, employment effects can only be perceived over a longer period of time. This holds for example for air-traffic controllers.

Also, a change in employment may affect other sectors either negatively or positively, as employees may find a job in another sector. The recommendation of the study team is to focus the social impact assessments on the aviation sector in particular.

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12 Eurostat definition. https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Full-time_equivalent_(FTE).

13 Booz&co (2009). Effects of EU Liberalisation on Air Transport Employment and Working Conditions. Prepared for: European Commission Directorate – General for Energy and Transport.

Scale

Following a study by Booz&Co (2009) on the effects of the creation of the EU internal market in air transport on employment and working conditions, it is shown that yearly employment growth (measured in number of employees) between 1998-2007 comprises 2.7%. Since the creation of the EU internal market can be seen as a development with a high impact, ECORYS regard a percentage change of 2.7% as a maximum reference category for the indicator change in employment. Even though the economic circumstances were different to the current situation, we think 2.7% as a maximum category is realistic, also regarding the employment change figures presented above. When employment changes this much as a consequence of EASA rulemaking (i.e. on top of regular employment changes), it can be regarded as a very high positive impact. As the change in employment is measured on a yearly basis, seasonality should not affect the results.

Therefore, the following scales are proposed:

Table 3.5: Change in number of employees

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>2.5%
High positive impact	+4	1 to 2.5%
Medium positive impact	+3	0.5 to 1%
Low positive impact	+2	0.05 to 0.5%
Very low positive impact	+1	0 to 0.05%
None	0	0
Very low negative impact	-1	-0.05% to 0
Low negative impact	-2	-0.5 to -0.05%
Medium negative impact	-3	-1 to -0.5%
High negative impact	-4	-2.5 to -1%
Very high negative impact	-5	<-2.5%

This indicator is suitable for impact assessments, as EASA rule making may influence employment directly.

1B. Change in ratio FTE / employee

Definition

The second indicator for impact of employment change, is the change in ratio of FTE per employee, or 'part-time employment rate'. This indicator represents employees who work part-time as a percentage of total employment[14]. Part-time work has increased greatly over the past decades and accounts for about 20 per cent of all jobs in the EU[15]. Part-time work is often seen as positive, because it brings flexibility to employers as well as employees[16]. Employers gain flexibility, because they can react better to market requirements and reorganising working time, while employees have more freedom to combine work with other activities, such as family life. However, part-time work may also be perceived more negatively, in cases where part-time work is accepted because no fulltime position can be found albeit desired. With positive labour market conditions, the part-time rate declines, indicating that part-time work is not a voluntary choice in all cases[17].

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14 Eurostat definition. https://ec.europa.eu/eurostat/web/products-datasets/product?code=tesem100.

15 Eurofound (2017), Aspects of non-standard employment in Europe, Publications Office of the European Union, Luxembourg.

16 Eurofound (2007). Part-time work in Europe.

17 Eurofound (2017). Aspects of non-standard employment in Europe, Publications Office of the European Union, Luxembourg.

Variations

As indicated above, the labour market conditions influence the change in involuntary part-time work. Therefore, the economic context should be considered when applying the scale.

Scale

As described above, part-time work may at cases be perceived as a good thing, specifically, when it leads to more flexibility in combining work and leisure or family life. On the other hand, part-time work may also in times be considered a negative development, when it regards "forced" part-time work. When people feel that they are obliged to reduce their working time, e.g. to save the company from hardships, part-time work may affect them negatively.

An example that was discussed at the stakeholder validation workshop, is a company that needs to downsize and has the choice to lay off employees or ask employees to start working part-time. If the latter option is chosen, no colleagues have to be laid off, but it is a negative effect for those employees who prefer to work on a fulltime contract.

A Eurofound study has indicated that *involuntary* part-time work increased from 22.4% to 29.1% from 2007 to 2015[18]. On an annual basis this is a change of 0.8%. If this trend is continued, we say that there is no impact. However, if this trend is reversed, and the annual growth of involuntary part-time work decreases, we consider this as positive impact. A very high positive impact may then be reached by affecting involuntary part-time work in such a way that it is reduced to zero. However, if the annual growth of involuntary part-time work increases, this may be perceived negatively. Even a small change can already have a very negative impact. Therefore, following from discussions at the stakeholder validation workshop, the scale for positive and negative impacts proposed is not symmetrical; the scale for negative impact ranges from 0 (no impact) to >0.4% (very high negative impact) as can be seen in Table 3.6 below.

Table 3.6: Change in ration FTE / employee

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-0.8%
High positive impact	+4	-0.6 to -0.8%
Medium positive impact	+3	-0.4 to -0.6%
Low positive impact	+2	-0.2 to -0.4%
Very low positive impact	+1	0 to -0.2%
None	0	0
Very low negative impact	-1	0 to 0.1%
Low negative impact	-2	0.1 to 0.2%
Medium negative impact	-3	0.2 to 0.3%
High negative impact	-4	0.3 to 0.4%
Very high negative impact	-5	>0.4%

As the part-time ratio will not be affected directly by EASA rule-making, this indicator seems to be most suitable for the monitoring and evaluation phase.

2. Employee turnover

When addressing turnover, a distinction may need to be made between voluntary (due to employees being able to find better jobs) and involuntary turnover (as a result of flexible contracts or job destruction). Changes in tasks, affecting the function level are also included here. However,

[18] Eurofound (2017). Aspects of non-standard employment in Europe, Publications Office of the European Union, Luxembourg.

the effects of a change of place of work for example (involuntary turnover) are dealt with under "mobility".

2A. Degree to which function levels change due to change in tasks (% of jobs affected)

Employee turnover may not only pertain to people but also to the content of jobs. An indicator of this may be the degree to which a function level changes due to changes in tasks.

Definition

This indicator can be defined as the extent to which tasks change in a specific function, and the number of jobs that are affected by this change. This does thus not include changes from employees to other functions, but only pertains to changes in function levels.

Scale

This indicator should be measured in two steps. First, the impact of changes in tasks should be considered, i.e. what is the percentage of tasks that change? For example, if 33% of tasks change, this could be considered a heavy change[19]. Secondly, the number of people affected by these task changes should be assessed. Afterwards, these two numbers should be multiplied to assess the effect. Furthermore, it is also important to assess whether the change is forced or voluntary. Some employees may be very happy with more tasks, while others are not. For now, we do not propose a quantitative scale with this indicator; it should be developed in the specific case of an impact assessment. Also, this indicator will be difficult to measure and may be assessed by means of a survey. EASA rule-making may affect tasks and functions directly; therefore, the indicator would be suitable for impact assessment.

2B. Change in employee turnover rate

Definition

Employee turnover is the rate at which employees leave a company and are replaced by new employees[20]. Change in employee turnover can be measured by the percentage of employees leaving or joining the firm as compared to total employment. A survey amongst 100 HR respondents indicates turnover rates in specific sectors of the aviation sector to be around 20 per cent[21].

Variations

Turnover is higher for groundhandling staff than for cabin crew[22]. Our stakeholder consultation has also indicated that for air-traffic controllers turnover is substantially lower to almost absent. The relevance of considering this indicator is thus dependent on the sub-sectors that are being assessed. Also, the base-level rate of turnover in a sector should be regarded when assessing impact, because a 5% change may have different impacts for different sectors.

Scale

Again, the relevant question to ask is whether impact on employee turnover is positive or negative. To indicate the social impacts, i.e. effects to workers, we focus on employees leaving the organisation, either voluntary or involuntary, as these departures impact workers themselves and workers who remain in the organisation. Research[23] has shown that voluntary quits are also

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19 As discussed at the stakeholder validation workshop.

20 Definition Cambridge Dictionary: https://dictionary.cambridge.org/dictionary/english/employee-turnover.

21 IATA (2018). IATA Aviation Human Resources Report 2018. Exploring recruitment, retention and staff development in the aviation industry.

22 As was stated in several of the stakeholder interviews.

23 E.g. Maertz Jr, C. P.,Wiley, J.W., LeRouge, C., and Campion, M. A. (2010). Downsizing effects on survivors: Layoffs, offshoring, and outsourcing. Industrial Relations: A Journal of Economy and Society, 49(2):275–285.

disruptive to organisations, for example due to replacement costs, and to employees who remain in the organisation. The scales proposed for this indicator can be seen in the following table.

Table 3.7: Change in employee turnover rate

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-2%
High positive impact	+4	-1.5 to 2%
Medium positive impact	+3	-1 to -1.5%
Low positive impact	+2	-0.5 to -1%
Very low positive impact	+1	0 to -0.5%
None	0	0
Very low negative impact	-1	0 to 0.5%
Low negative impact	-2	0.5 to 1%
Medium negative impact	-3	1 to 1.5%
High negative impact	-4	1.5 to 2%
Very high negative impact	-5	>2%

As this indicator will most likely not be affected by EASA rule-making directly, but occur more as an indirect effect, this indicator is most suitable for monitoring and evaluation.

3.2.2 *Working conditions*

Working conditions comprise several criteria, i.e. wages, wage setting mechanisms or labour costs, employment protection, work organisation, exercise of labour standards, access to vocational training and career development advice, occupational health and safety, social dialogue and just culture.

Indicators

3. Effect on wages, wage setting mechanisms or labour costs

Whereas wages comprise labour income and positively correlate with consumption, labour costs comprise the employers' total employee wages plus the cost of benefits and (payroll) taxes and negatively affect the competitiveness of firms[24]. Following the stakeholder consultations, the chosen focus point of this impact category has been set on net income and retirement age.

3A. Change in net income per FTE

Definition

Net income per fte is the income after deduction of income taxes and social security contributions, and addition of family allowances[25], measured on average over a country or sector per fte. For this indicator, it is important to check for double counting with the economic impact assessment. An increase in labour productivity (economic impact) may imply a decrease in employment (social impact). This may be accompanied by wage increases (social impact), but not necessarily so, which implies higher profit for companies (economic impact). If wage increases are the effect of efficiency gains, they may therefore reflect (partly) effects as measured in the economic impact assessment.

[24] EC (2017), Better Regulation Toolbox, p. 181.

[25] Eurostat definition, https://ec.europa.eu/eurostat/statistics-explained/index.php/Wages_and_labour_costs#Net_earnings_and_tax_burden.

Variations

Wage increases following efficiency gains may have different effects for different stakeholders. For example, efficiency gains may have negative employment effects due to layoffs for certain employees in organisations. These interactions should be considered per assessment.

Scale

Statistics on the annual net earnings in EU28 show an annual increase in net earnings of about 3.5% per year[26]. Labour costs in aviation have a rather stable course over the past decades[27]. Regarding changes in (net) income in aviation there are not many data available. Income is slightly higher in the transport sector than in other sectors in EU28. Furthermore, people in air transport generally earn more than across other sub-sectors of the transport industry[28]. Based on anonymous data of the European Regional Airlines Association (ERAA), Steer Davies Gleave (2015) reports that the salary for cabin crew decreased by 15% over approximately a ten-year period (2005 to 2014). The same report mentions that stakeholders vary in their assessment of income change: airports and airlines generally suggest increases in income, while worker representatives claim income has decreased[29].

Due to this rather ambiguous or unclear picture of the change in net income per fte in the aviation sector. A scale based on the annual change in net income in the whole EU economy is proposed. The baseline change is 3.5%. If through regulations this percentage would double, this may be considered a very high impact. The steps from zero change to doubling the annual percentage change imply a 0.88% margin per step. Based on this, the following scale is proposed.

Table 3.8: Change in net income per FTE[30]

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>3.5%
High positive impact	+4	2.63 to 3.5%
Medium positive impact	+3	1.75 to 2.63%
Low positive impact	+2	0.88 to 1.75%
Very low positive impact	+1	0 to 0.88%
None	0	0
Very low negative impact	-1	0 to -0.88%
Low negative impact	-2	-0.88 to -1.75%
Medium negative impact	-3	-1.75 to -2.63%
High negative impact	-4	-2.63 to -3.5%
Very high negative impact	-5	>-3.5%

The indicator for change in net income per FTE may be used for impact assessment.

3B. Change in maximum retirement age

Definition

Retiring is the process by which people withdraw from employment for reasons of age[31]. In aviation for certain professions, early requirement is regulated because of certain job requirements, such as high safety aspects. Not all employees perceive early retirement as a positive thing; some

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26 http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn_nt_net&lang=en.

27 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

28 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

29 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

30 Note that this change is on top of baseline change. This means that no change means there is no effect as consequence of regulation, but there may still be income increases, e.g. because of inflation.

31 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Labour_force_survey_statistics_-_transition_from_work_to_retirement&oldid=191856.

employees are dissatisfied to have to quit their job at a certain age, while they would prefer to continue working. Therefore, it is important to distinguish positive and negative early retirement.

Variations

Early retirement is an important condition for employees working in jobs that have a high safety aspect. It is thus mainly relevant only in some professions in the aviation industry; pilots and air-traffic controllers. For pilots in certain countries, the retirement age is 65. A recent report of EASA advised not to increase this retirement age[32]. Studies had shown that a substantial number of pilots took voluntary retirement before reaching the age of 65, and the average retirement age was 63 years old. Early retirement was often chosen as a consequence of health issues and fatigue[33]. Global figures for air-traffic controllers reveal an average mandatory retirement age of 62 and the median of 60[34].

Scale

Over a year, the average age of retirement will likely not change with more than a month. If the retirement age would increase with a month, this can to be a very low impact. If we take 62 as the average maximum retirement age and consider an increase of one month as a very low impact and an increase of 5 months as a very high negative impact. The percentage change steps for a month increase will be about 0.13%. The following scale is therefore proposed.

Table 3.9: Change in maximum retirement age

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	<-0.54%
High positive impact	+4	-0.40 to -0.54%
Medium positive impact	+3	-0.27 to -0.40%
Low positive impact	+2	-0.13 to -0.27%
Very low positive impact	+1	0 to -0.13%
None	0	0
Very low negative impact	-1	0 to 0.13%
Low negative impact	-2	0.13 to 0.27%
Medium negative impact	-3	0.27 to 0.40%
High negative impact	-4	0.40 to 0.54%
Very high negative impact	-5	>0.54%

The indicator for change in maximum retirement age may be used in the impact assessment stage.

4. Effect on employment protection

The level of employment protection is most often related to the type of work contract employees have. Flexibilisation of working hours and reduction in job security may negatively affect employee's income and subsequently their living conditions, whereas highly protective employment protection legislation may lead to large differences in costs and rights between employees with permanent and atypical contracts[35]. Atypical contracts are often used by employers to increase flexibility, reduce costs and support business growth[36].

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32 EASA. 2019. Age Limitations Commercial Air Transport Pilots, TNO.

33 Ibid.

34 CANSO. 2018. Global Air Navigation Provider Services Performance Report 2018.

35 EC (2017), Better Regulations Toolbox, p. 182.

36 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

4A. Change in percentage of employees in atypical employment

The first indicator is the percentage of employees on atypical contracts.

Definition

The definition of atypical contracts used for this methodology includes all contracts other than open-ended contracts. Therefore these include temporary workers, temporary agency workers, zero-hour contracts and self-employed. Outsourcing is captured in the labour turnover indicator.

Variations

A study among pilots on the use of atypical work (including outsourcing) shows that 16% have an atypical arrangement[37]. Atypical contracts are less common for air-traffic controllers.

Scale

The share of employees working on a temporary contract, i.e. employees whose main job will terminate after a period fixed in advance[38], increases by approximately 0.4% per year[39]. With this baseline it can be considered a very high negative impact should the trend double. A high positive impact indicates more permanent contracts and thus more employment protection. Table 3.10 presents the proposed scales.

Table 3.10: Change in percentage of employees on atypical contracts

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-0.4%
High positive impact	+4	-0.3 to -0.4%
Medium positive impact	+3	-0.2 to -0.3%
Low positive impact	+2	-0.1 to -0.2%
Very low positive impact	+1	0 to -0.1%
None	0	0
Very low negative impact	-1	0 to 0.1%
Low negative impact	-2	0.1 to 0.2%
Medium negative impact	-3	0.2 to 0.3%
High negative impact	-4	0.3 to 0.4%
Very high negative impact	-5	>0.4%

Indicator 4A on atypical contracts may be used for impact assessment.

Next to indicator 4A described above, during the stakeholder consultation process it was suggested to include an indicator on the value of subcontracted work to third countries. Outsourcing has increased over the last ten years across the aviation sector. The trend is also expected to continue[40]. The reasons for outsourcing are similar as those for use of atypical employment contracts. Worker representatives have voiced their concerns, as outsourcing would lead to lower social security, lower wages, less training and holiday entitlement. Because the loss of employees through outsourcing will be prevalent through the employee turnover indicator (2A), we do not include outsourcing as a separate indicator to prevent double counting.

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37 Gent University (2015), Atypical Employment in Aviation.

38 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Employee_with_a_temporary_contract.

39 http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa_etpgan&lang=en.

40 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

5. *Effect on work organisation*

Work organisation can be described as the level of work autonomy, teamwork, job rotation, pace of work and work intensity and can be influenced by for instance the introduction of new technology or industrial restructuring[41]. In the RIA on Harmonised European Transition Altitude[42] (HETA), the effect on ATC and pilots' workload was for instance taken into account when assessing the policy options. Several factors are important here, such as work hours, flexibility of work hours, but also work intensity.

5A. Change in average number of hours worked

Definition

This indicator can be measured by the average number of hours worked over a 4 week period.

Variations

The number or work hours relates for example to flight time limitations for pilots. For Commercial Air Transport Operators this can be maximally 190 hours duty hours in 28 consecutive days[43]. Interview respondents indicate that in most organisations work time was lower than this limit, but that the numbers have been pushed upwards as a consequence of competition in the sector. For air-traffic controllers overtime hardly occurs.

Scale

Assuming a maximum of 190 hours per 28 consecutive days, an increase of 10% means 5 extra work hours per week. This can be considered a very high negative impact. A positive impact would be a decrease of hours. However, it should be discussed whether this can be seen as a positive impact in all circumstances, especially when it regards extreme values. People may not prefer working less hours indefinitely. Table 3.11 presents the proposed scales for this indicator.

Table 3.11: Change in average number of hours worked

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-10.1%
High positive impact	+4	-7.7 to -10.1%
Medium positive impact	+3	-5.2 to -7.7%
Low positive impact	+2	-2.6 to -5.2%
Very low positive impact	+1	0 to -2.6%
None	0	0
Very low negative impact	-1	0 to 2.6%
Low negative impact	-2	2.6 to 5.2%
Medium negative impact	-3	5.2 to 7.7%
High negative impact	-4	7.7 to 10.1%
Very high negative impact	-5	>10.1%

This indicator may be used for impact assessment.

5B. Change in workload

Definition

Workload is the perceived complexity or intensity of work.

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41 EC (2017), Better Regulations Toolbox.

42 EASA (2015), Report on Harmonised European Transition Altitude [internal document].

43 COMMISSION REGULATION (EU) No 83/2014 of 29 January 2014.

Scale

Change in workload can be measured through the percentage change in employees' workload. In the EASA (2014) report on HETA,[44] workload was measured using the level of complexity regarding operational/technical layout. A very high positive impact results in in hardly any changes to/restructuring of current operation/technical layout. This needs to be assessed qualitatively. It is difficult to define a baseline of acceptable workload or complexity, as this differs per function/employee. Therefore, we focus on relative change vis-à-vis the status quo of perceived workload. The proposal for this indicator is to follow the HETA report and use the following scale as presented in Table 3.12.

Table 3.12: Change in workload

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-50% decrease of workload/complexity
High positive impact	+4	40–50 % decrease of workload/complexity
Medium positive impact	+3	30–40% decrease of workload/complexity
Low positive impact	+2	20–30% decrease of workload/complexity
Very low positive impact	+1	Less than 20 % decrease of workload/complexity
None	0	0
Very low negative impact	-1	Less than 20 % increase of workload/complexity
Low negative impact	-2	20–30 % increase of workload/complexity
Medium negative impact	-3	30–40 % increase of workload/complexity
High negative impact	-4	40–50 % increase of workload/complexity
Very high negative impact	-5	More than 50 % increase of workload/complexity

This indicator may be used for impact assessment.

Next to indicators 5A and 5B described above, in the stakeholder consultation also indicators regarding flexibility in planning of working hours and use of on-call shifts were suggested. However, these indicators are not affected by rule-making directly, and therefore are left out of our methodology.

6. Effect on the exercise of labour standards

Labour standards can be defined as a set of rules (produced by the ILO) that protect the rights of workers and make sure they have good working conditions[45]. These labour standards largely rely on national legislation or social partner agreements but can be impacted by European level intervention (for instance through Flight and Duty Time Limitations and Rest Requirements[46]).

6A. Change in distribution of nationality of labour contracts

Definition

The indicator that we use to measure the criterion of exercise of labour standards is the change in the distribution of labour contracts across countries.

The rationale behind this indicator is the question whether employers would be more or less enabled to "shop" favourable labour conditions in certain countries, i.e. so-called *"flag states"*. This indicator may be assessed by assessing the change in percentage of labour contracts with certain nationalities.

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44 EASA (2015), Report on Harmonised European Transition Altitude.

45 As defined by the Cambridge Dictionary.

46 EASA (2010), NPA No 2010-14A.

Variations

This indicator may mostly be valid for airlines, and less so aviation wide.

Scale

As this indicator refers to a specific situation, ECORYS proposes to define the scale according to the context of the specific assessment. This indicator is more useful for monitoring purposes instead of assessing impact upfront.

Job satisfaction is an important social indicator, but mostly regards indirect effects of other aspects. For example, job satisfaction may be lower for employees working in atypical contracts. As job satisfaction is mostly an indirect effect, it has not been included as a separate indicator

7. Effect on access to vocational training and career development advice

As stated in the Better Regulation Toolbox[47], training and lifelong learning opportunities can influence career perspectives and security.

7A. Change in % of workers receiving vocational training / career development advice

Definition

The percentage of workers receiving training on the job or career development advice within their organisation.

Scale

This indicator may be assessed by administering surveys with HR managers. A high positive impact could be indicated by a substantial increase in the number of workers receiving training or career development advice. This may for example be the case when there is a 50% change in the number of workers who receive training or career development advice. This indicator may be directly affected by EASA rules, and therefore may be used for impact assessment.

Table 3.13: Change in percentage of employees receiving training or career development advice

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>50%
High positive impact	+4	37.5 to 50%
Medium positive impact	+3	25 to 37.5%
Low positive impact	+2	12.5 to 25%
Very low positive impact	+1	0 to 12.5%
None	0	0
Very low negative impact	-1	0 to -12.5%
Low negative impact	-2	-12.5 to 25%
Medium negative impact	-3	-25 to -37.5%
High negative impact	-4	-37.5 to -50%
Very high negative impact	-5	>50%

8. Effect on occupational health and safety

The number of accidents and incidents in air transport has reduced over the last years. Also, employees in the aviation sector generally feel well informed about occupational health and safety[48]. EU-OSHA has identified the following health and safety risks at work for air transport employees: ergonomic risks, work organisational stressors, noise, dangerous substances, vibration,

[47] EC (2017), Better Regulation Toolbox, p.183.

[48] Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

unusual working times, working away from home and from a work base, lack of facilities, and a complex work situation[49].

We recommend measuring the effect on occupational health and safety with a number of indicators, namely the changes in number of work-related safety incidents, sickness absence and occurrence of provisional inability.

8A. Change in number of work-related safety incidents

Definition

It is important to distinguish work-related safety incidents from aviation accidents, which are covered by the safety criteria of the MCA. Incidents are defined as follows: "An incident is referred to as a work-related event(s) in which an injury or ill health (regardless of severity) or fatality occurred, or could have occurred. An accident is regarded as a particular type of incident in which an injury or illness actually occurs. A near miss is an unplanned event that had the potential to result in injury, illness or damage – but fortunately, it did not[50]. Stakeholders report a decrease in accidents and incidents in the aviation sector in the period from 2004 to 2014[51]. However, Eurostat data show more fluctuations when it comes to accidents: non-fatal accidents do not show a pattern of steady decrease over the years 2012 to 2016. Instead, there is a difference of 0.65% averaged over 10 years in non-fatal accidents, with a minimum of -18% and a maximum of 11%. Fatal accidents have changed on average 12.8% per year, with a minimum of -53% and a maximum of 160% (from 5 to 13 fatal accidents between 2013 and 2014).

Scale

A decrease in safety related incidents would be considered a positive impact. We take the average of annual change in non-fatal accidents to develop our scale, which comes to an annual change of 0.65%. Because fatal accidents rates vary largely per year, and are low in number, we choose to not include these in the scale. We argue that if accidents would decrease by 1.3% due to rulemaking, meaning a decreasing accident rate, it would be a very high positive impact. The scale of impact for these positive impacts (decrease of incidents) is less steep than the negative effects as only a slight percentage increase in safety related incidents may have a high impact as can be seen in the scale proposed for Table 3.14.

Table 3.14: Change in number of work-related safety incidents

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-5.2%
High positive impact	+4	-3.9 to -5.2%
Medium positive impact	+3	-2.6 to -3.9%
Low positive impact	+2	-1.3 to -2.6%
Very low positive impact	+1	0 to -1.3%
None	0	0
Very low negative impact	-1	0 to 0.7%
Low negative impact	-2	0.7 to 1.3%
Medium negative impact	-3	1.3 to 2.0%
High negative impact	-4	2.0 to 2.6%
Very high negative impact	-5	>2.6%

[49] European Agency for Safety and Health at Work (EU-OSHA): https://oshwiki.eu/wiki/Air_transport_%E2%80%93_OSH_issues.

[50] European Agency for Safety and Health at Work (2019), https://oshwiki.eu/wiki/Accidents_and_incidents https://osha.europa.eu/en/wiki-page/near-misses.

[51] Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

Due to the direct impact of EASA rules on safety, this indicator may be used for impact assessment.

8B. Change in absence rate due to sickness

Definition

Sickness absence is defined as non-attendance when scheduled to work, so holidays and other planned leave are excluded[52].

Sickness absence over all sectors is on average 3.8% in the European Member States. Extremes are 0.8% and 7.7%[53]. In the transport sector, employees believe their health is similarly good as in other sectors[54].

Scale

A change from the average of 3.8% to a sickness absence of 7.7% can be considered as a very high negative impact. A very high positive impact is an improvement of sickness absence from 3.8% to half (1.9%). Based on these, Table 3.15 presents the suggested scale.

Table 3.15: Change in absence rate due to sickness

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-50%
High positive impact	+4	-38 to -50%
Medium positive impact	+3	-25 to -38%
Low positive impact	+2	-13 to -25%
Very low positive impact	+1	0 to -13%
None	0	0
Very low negative impact	-1	0 to 13%
Low negative impact	-2	13 to 25%
Medium negative impact	-3	25 to 38%
High negative impact	-4	38 to 50%
Very high negative impact	-5	>50%

This indicator may be used for monitoring.

8C. Change in occurrence of "provisional inability"

Definition

Provisional inability is "a temporary state in which the licence holder is prevented from exercising the privileges of the licence when ratings, endorsements and his/her medical certificate are valid"[55]. It can be compared to so-called "presenteeism", i.e. showing up at work while not fully healthy or feeling well.

The extent to which this is prevalent, should be assessed by means of surveys, and monitored to disentangle a trend. This indicator may be used for impact assessment.

9. Effect on Social dialogue

The Better Regulation Toolbox[56] states that the influence of social partners on working conditions and wage negotiations are important means to organise a dialogue between employers and

52 Eurofound. 2010. Absence from work.
53 Eurofound. 2010. Absence from work.
54 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.
55 https://www.easa.europa.eu/sites/default/files/dfu/Easy%20Access%202%20ATCO.pdf.
56 Steer Davies Gleave (2015), Study on employment and working conditions in air transport and airports.

employees and serve as "*important mechanism for conflict resolution and a means to internalise external effects*".

9A. Change in union representation

Definition

Union representation or union density can be defined as the proportion of employees who are union members[57].

Union representation in the aviation sector is higher than the average over all sectors. Differences between sectors within the aviation industry are also present. For example, pilots are more highly unionised that other professions (estimated over 70%)[58]. The study by Steer Davies Gleave reports that there have been no noticeable changes in unionisation levels since 2005. Although more recent developments regarding unionisation in low cost carriers are not included in this assessment.

Scale

Since unionisation hardly changes over the years since 2005, ECORYS expects that small percentage changes can be perceived as high in impact according to the scale proposed below.

Table 3.16: Change in union representation

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>4%
High positive impact	+4	3 to 4%
Medium positive impact	+3	2 to 3%
Low positive impact	+2	1 to 2%
Very low positive impact	+1	0 to 1%
None	0	0
Very low negative impact	-1	0 to -1%
Low negative impact	-2	-1 to -2%
Medium negative impact	-3	-2 to -3%
High negative impact	-4	-3 to -4%
Very high negative impact	-5	>-4%

This indicator is most suitable for monitoring purposes.

10. Effect on just culture

Just culture means a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training, but in which gross negligence, wilful violations and destructive acts are not tolerated[59].

Just culture is considered a social impact, because it concerns the social safety aspects of aviation work. For example, it includes the way organisations use the information from accidents and incidents to learn for future occasions.

In 2016, the London School of Economics and Political Science published a report[60] on the perceptions of safety culture in the aviation sector. In this report, just culture has been

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57 European Trade Union Institute. https://www.worker-participation.eu/National-Industrial-Relations/Across-Europe/Trade-Unions2.

58 Ibid.

59 Regulation (Eu) No 376/2014 of the European Parliament and of the Council.

60 LSE (2016), European pilots' perceptions of safety culture in European Aviation. Brussels: Eurocontrol.

operationalised by means of six statements. These statements are indicated below to measure the two suggested indicators on just culture.

10A. Change in likelihood of occurrences being reported

Definition

This indicator measures the reported likelihood of occurrences being reported.

Scale

This indicator can be assessed by monitoring the occurrences that are being reported over time. Furthermore, surveys can be administered including the following items[61]:

- Pilots who report safety-related occurrences are treated in a just and fair manner;
- Voicing concerns about safety is encouraged;
- I am prepared to speak to my direct manager when unsafe situations are developing.

This indicator is most suitable for impact assessment purposes.

10B. Change in likelihood of actions following the reporting of just-culture

Definition

This indicator measures the reported likelihood of actions following reporting of incidents.

Scale

This indicator should be qualitatively assessed. Furthermore, it is important to pay attention to the way in which impacts are interpreted. Actions can be positive in terms of learning from incidents and improving procedures. However, actions can also imply sanctioning of individual employees, which have an opposite effect on social safety.

Items that may be included in a survey are[62]:

- We get timely feedback on the safety issues we raise;
- I am satisfied with the level of confidentiality of the reporting and investigation process;
- A staff member who regularly takes unacceptable risks would be disciplined or corrected in this company.

This indicator is most suitable for impact assessment purposes.

10C. Level of privacy protection

Definition

This indicator measures the level of protection ensuring data collected for safety reasons is limited to non-punitive aspects. The privacy of employees should be protected. In collecting data that is crucial for safety purposes, employees should be guaranteed that their personal data (audio or video files, for example) are not used for penalising them on the work delivered.

Scale

This indicator should be assessed qualitatively, for example using interviews and surveys. This indicator is most suitable for impact assessment purposes.

61 LSE (2016), European pilots' perceptions of safety culture in European Aviation. Brussels: Eurocontrol.

62 LSE (2016), European pilots' perceptions of safety culture in European Aviation. Brussels: Eurocontrol.

3.2.3 *Governance, participation and good administration*

Indicators

11. Effect on the autonomy of social partners in the areas for which they are competent

Two indicators are used to measure this criterion, namely the change in the existence of a social impact mitigation system and the change in information and consultation rights.

11A. Change in existence of social impact mitigation system (similar to safety management system)

One of the indicators here may be whether there is a system for change management dealing with social impact. There is room to mitigate negative effects when you have a social change management system within companies.

Definition

A 'safety management system' means a systematic approach to managing aviation safety including the necessary organisational structures, accountabilities, policies and procedures, and includes any management system that, independently or integrated with other management systems of the organisation, addresses the management of safety[63]. A social impact mitigation system would be a similar management system, focused on mitigating social impacts. It could thus be defined as a systematic approach to mitigating negative social impacts, including the necessary organisational structures, accountabilities, policies and procedures, and includes any management system that, independently or integrated with other management systems of the organisation, addresses the mitigation of negative social impacts.

Scale

Existence of a social impact mitigation system should be assessed qualitatively, for example using interviews and surveys. This indicator is most suitable for monitoring purposes.

11B. Change in the rights of unions to organise actions (e.g. strikes)

The effect on the change in the rights of unions to organise actions such as strikes, as a consequence of EASA rule-making, should be assessed qualitatively.

Definition

In the European Union, the right to strike is enshrined in Article 28 of the Charter of Fundamental Rights of the European Union ('Right of collective bargaining and action'):[64]

> 'Workers and employers, or their respective organisations, have, in accordance with Union law and national laws and practices, the right to negotiate and conclude collective agreements at the appropriate levels and, in cases of conflicts of interest, to take collective action to defend their interests, including strike action.'

Scale

EASA rulemaking could impact the right to strike in the sense that certain rules may prohibit workers and employers to strike, because of safety reasons. This may be the case only for specific rules, and changes should be assessed qualitatively. This indicator is most suitable for monitoring purposes.

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63 Regulation (Eu) No 376/2014 of the European Parliament And of the Council.

64 Eurofound (2010), Right to strike. https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/right-to-strike.

12. Effect on information and consultation rights

The effect on information and consultation rights is measured through change in the level of information and consultation rights in organisations.

12A. Change in the level of right of information and/or consultation in organisations, companies

Employees in the aviation sector are in some cases represented by (European) works councils or other arrangements such as national information and consultation bodies. Perceptions on the functioning of information and consultation differ[65]. For example, airlines and airports indicate that information and consultation are well arranged, while employee representative organisations are less positive about this.

Definition

Important part of the social dialogue between employers and employees is the right of employees to be informed and consulted. Information and consultation are e.g. required regarding:

- the recent and probable development of the undertaking's or the establishment's activities and economic situation;
- the situation, structure and probable development of employment within the undertaking or establishment and any anticipatory measures envisaged, in particular where there is a threat to employment;
- decisions likely to lead to substantial changes in work organisation or in contractual relations.[66]

Scale

EASA may influence social dialogue by regulating that workers (representatives) need to be consulted on certain topics. An example that was given was the ATCO regulation on rostering systems[67]. The way in which rulemaking influences the social dialogue needs to be qualitatively assessed. For example, very high positive impact may be perceived when workers are granted full codetermination on issues on which they formerly were only consulted. Likewise, medium positive impact may be perceived when workers need to be consulted on issues on which they formerly only needed to be informed. This indicator is most suitable for monitoring purposes.

3.2.4 *Access to and effects on social protection, health and educational systems*

Indicators

13. Effect on the level of education

It is important to take into account whether changes occur in degrees required or entry levels for specific professions.

13A. Change in education level requirements for functions

Definition

The entry requirement to be eligible to fulfil certain jobs, measured through degrees, educational certificates or licenses requirements.

Scale

The change in amount of education level requirements for specific functions can be used as an indicator. This indicator may be assessed qualitatively, for example by studying vacancy texts over time. It should be assessed per rule whether this indicator is perceived as positive or negative. For example, higher requirements could be perceived as a positive effect as it may reflect higher

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65 Ibid.

66 EC (2019), Employee Involvement - Framework on Information and Consultation. https://ec.europa.eu/social/main.jsp?catId=707&intPageId=210&langId=en.

67 European Commission. March 2017. REGULATION (EU) 2017/373.

quality. However, it may also be regarded negative, as it may raise barriers to enter a certain profession or job. This indicator may be used for impact assessment.

14. Effect on the mobility of workers

Mobility of workers (across and within countries and administrative regions) is important to take into account because access to social protection may differ between countries/regions, and in that way affect life of workers in important ways. For example, changes in workplace may have a detrimental effect on family life and well-being. Access to social protection in some cases differs between administrative regions[68], making it relevant to take into account not only countries, but also mobility between administrative regions.

14A. Change in the percentage of workers for which principal place of employment changes within country / administrative region

Definition

Change in the percentage of workers for which principal place of employment changes involuntarily, due to movement of job or company, within country / administrative region.

Scale

It is useful to distinguish between chosen and forced mobility as a result of change of principal place of employment. Social impacts mostly regard the effects of forced mobility, e.g. having to move because your company or job moves to another place of employment. As these figures may not be readily available, company surveys or company data may be used to measure this indicator.

A small number of workers in a company, whose principal place of employment changes, may be perceived as a large impact. The following scale is proposed for this indicator.

Table 3.17: Change in the percentage of workers for which principal place of employment changes within country / administrative region

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-2%
High positive impact	+4	-1.5 to 2%
Medium positive impact	+3	-1 to -1.5%
Low positive impact	+2	-0.5 to -1%
Very low positive impact	+1	0 to -0.5%
None	0	0
Very low negative impact	-1	0 to 0.5%
Low negative impact	-2	0.5 to 1%
Medium negative impact	-3	1 to 1.5%
High negative impact	-4	1.5 to 2%
Very high negative impact	-5	>2%

This indicatory may be used for monitoring.

14B. Change in the percentage of workers for which principal country / administrative region of employment changes

Definition

Change in the percentage of workers for which principal country / administrative region of employment changes involuntarily, due to movement of job or company.

[68] OECD definition: "Administrative regions are the territorial units which a country is divided in. There is normally an administration with some government functions and powers connected to administrative regions. The jurisdiction of an administrative area normally covers the total area inside its borders."

Scale

As these figures may not be readily available, company surveys or company data may be used to measure this indicator. Changes across countries are expected to be even more impactful than changes within countries. Therefore, Table 3.18 presents the proposed scale.

Table 3.18: Change in the percentage of workers for which principal country / administrative region of employment changes

Qualitative description	Score	Quantitative impact
Very high positive impact	+5	>-1%
High positive impact	+4	-0.75 to 1%
Medium positive impact	+3	-0.5 to -0.75%
Low positive impact	+2	-0.25 to -0.5%
Very low positive impact	+1	0 to -0.25%
None	0	0
Very low negative impact	-1	0 to 0.25%
Low negative impact	-2	0.25 to 0.5%
Medium negative impact	-3	0.5 to 0.75%
High negative impact	-4	0.75 to 1%
Very high negative impact	-5	>1%

This indicator may be used for monitoring.

14C. Cross border mobility within EU

Definition

Change in barriers to voluntary mobility across borders within the EU. This indicator is included to reflect the positive aspect of labour mobility due to the European Single Market, implying free movement of labour.

Scale

This indicator may be measured by assessing the number of legal or regulatory changes during a certain time period, regarding free movement of labour. This indicator may be used for impact assessment.

3.2.5 *Public health & safety*

Indicators

15. Effect on lifestyle-related determinants of health

The effects on lifestyle-related determinants of health may be measured by the change in use of support programmes. These give an indication of substance abuse and addictions at the workplace.

15A. Change in use of support programmes to combat addictions (alcohol, drugs other)

Definition

Lifestyle-related determinants of health are often described in terms of smoking behaviour, alcohol consumption and diet[69], but also substance use is a lifestyle health determinant. Organisations may have (peer) support programmes in place to deal with these and other private life elements.

[69] Joumard et al. (2008), Health Status Determinants: Lifestyle, Environment, Health Care Resources and Efficiency. OECD Working papers no. 627.

Scale

Work-related stress factors (stress, fatigue, unhappiness with move) may bring along indirect effects on private life, such as increase in substance use. There are national laws, outside of operating personnel, on the amount of substance use that is allowed at work. This indicator may be measured in terms of the change in (peer) support programmes. The change can be assessed qualitatively by means of surveys. In assessing the impact, it is important to interpret the direction of the change: i.e. an increase in use of (peer) support programmes may be positive as more people are willing to seek help, but it may be also perceived as negative, as more people deal with addictions. This indicator may be used for monitoring purposes.

16. Effect on particular risk groups

This needs to take into account changes in possible different treatment of specific groups of workers, in terms of discrimination and inequality. This may regard women, disabled etc.

16A. Change in access to jobs for specific groups of workers groups (disability; gender; age).

Definition

Specific groups of workers might experience less access to jobs than others, for instance minority groups, disabled workers, older workers or female workers.

Scale

Positive impacts of regulations enable all groups of workers to have equal access to jobs. High positive impact may be indicated by an increase in labour participation of specific groups. Furthermore, surveys may assess whether the perceived labour market position of specific groups has improved in the aviation sector. Also, measures to improve labour participation of specific groups may be monitored. This indicator may be used for monitoring purposes.

4 Methodology Framework Social Impact Assessment

4.1 Introduction

In Chapter 3, a longlist of potential indicators has been identified and described. As discussed, every individual indicator is useful in describing a specific social aspect that may directly or indirectly be affected by regulation developed by EASA. It was also concluded in Chapter 3 that some indicators are relevant for ex ante appraisal and for monitoring and evaluation of impacts, while others are less suitable for ex ante appraisal, but can still be used in monitoring the developments in the sector in general or more specifically the impact of a new regulation once it has been implemented.

The main criterion in distinguishing between these two sets of indicators is whether the particular aspect is directly affected by provisions laid down in the proposed EASA regulation.

Based on the answer to this question the following distinction has been made in the indicators described in Chapter 3 (see Table 4.1).

The following sections describe how the indicators deemed suitable for impact assessment are brought together in the social impact framework. The framework has been transposed also into an Excel-file that is submitted together with this report. References will be made to this file in the description of the framework.

The framework is set up in such a way that thee policy options can be evaluated in one spreadsheet. This means that that scoping and weights are identical for these three options. Only step 4, in which the impact is scored for a specific policy options, is different for the various policy options.

Table 4.1: Indicators for Impact Assessment and Monitoring & Evaluation

Category and Criterion	Impact assessment (and M&E)	Monitoring & Evaluation
Employment and labour markets		
Effect on total employment	1A. **Number of fte**	1B. **Ratio fte/employee**
Effect on turnover of workers	2A. *Degree to which function levels change due to change in tasks of function*	2B. **Employee turnover rate**
Working conditions		
Effect on wages, wage setting mechanisms or labour costs	3A. **Net income per fte** 3B. **Change in maximum retirement age**	
Effect on employment protection	4A. **Percentage of employees on atypical ('flexible') contracts**	
Effect on work organisation	5A. **Average number of hours worked** 5B. **Change in workload**	
Effect on the exercise of labour standards		6A. *Use of non-national labour contracts*
Effect on access to vocational training and /or advice on career development	7A. **Use of vocational training / career development advice**	
Effect on occupational health and safety	8A. **Work related safety incidents** 8C. *Occurrence of "provisional inability"*	8B. **Absence rate due to sickness**
Effect on social dialogue		9A. **Union representation**
Effect on 'just culture'	10A. *Likelihood of occurrences being reported* 10B. *Likelihood of actions following the reporting of occurrences* 10C. *Level of privacy protection*	
Governance, participation and good administration		
Effect on the autonomy of social partners in the areas for which they are competent		11A. *Existence of social impact mitigation system* 11B. *The rights of unions to organise actions (e.g. strikes)*
Effects on information and consultation rights		12A. *Right of information and/or consultation in organisations, companies*
Access to and effects on social protection, health and educational systems		
Effect on the level of education	13A. *Education level requirements for functions*	

Category and Criterion	Impact assessment (and M&E)	Monitoring & Evaluation
Effect on the mobility of workers	14C. Cross border mobility within EU	14A. **Secondment within country / administrative region** 14B. **Secondment to outside country / administrative region**
Public health & safety		
Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs		15A. *Use of support programmes to combat addictions (alcohol, drugs other)*
Effect on position of specific groups of works		16A. *Access to jobs for specific groups of workers groups (disability; gender; age).*

NB: For **indicators in bold** a quantitative scale is proposed. For *indicators in italics* a qualitative assessment is required.

4.2 General set up of the assessment framework

In carrying out the social impact assessment, the following steps need to be followed:

1. Scoping;
2. Defining the relevant indicators;
3. Defining the relative weights;
4. Assessing the direction and size of the impact;
5. Calculating the overall score.

The steps relate to the steps of the MCA methodology as described in chapter 2 as follows (see Table 4.2). In setting the steps for the assessment, the Excel sheet can be used.

Table 4.2: Relation between MCA methodology and the assessment framework social impacts

Steps in a MCA (chapter 2)	Steps of the framework
2. Specify criteria and indicators	1. Scoping, 2. Defining the relevant indicators
4. Determine score for each option	4. Assessing the direction and size of the impact
5. Assign weights	3. Defining the relative weights
6. Combine the weights and the scores for each option to derive an overall value	5. Calculation the overall score

Step 1: Scoping

The scoping exercise consists of two parts. Depending on the subject and contents of the proposed regulation, first it has to be established which of the 16 identified criteria need to be taken into account in the impact assessment and what their relative importance is (high, medium, low or none). For this, the tab "Step 1" in the spreadsheet can be used. As explained above, 6 of the 16 identified criteria are deemed more relevant for monitoring than for ex ante impact assessment. For this reason, it is recommended to exclude these from the following steps. This can be done by setting their importance at "none".

Figure 4.1 shows the list of criteria in a situation in which these six criteria are not taken into account further. This concerns criteria 6 (labour standards), 9 (social dialogue), 11 (autonomy social partners), 12 (information and consultation rights), 15 (lifestyle related determinants of health) and 16 (position of specific groups). Again, it is emphasized that this does not mean that these aspects are not important, but rather that they are not directly affected by EASA rules. There may be an indirect effect, though, and this is the reason for these criteria to be considered for monitoring.

In the list presented in Figure 4.1, the 10 remaining criteria are deemed equally important (high importance for all), following the preference of the consulted social partners. This is reflected in the values in the grey areas, which are the values that are used in the following steps.

The last column in Figure 4.1 (suggested value) reflects the suggestion by Ecorys for some differentiation in the relative importance. The suggestion reflects Ecorys' interpretation of an exercise carried out with a small number of stakeholders (see Annex IV).

Figure 4.1: Selecting the relevant criteria (tab Step 1)

STEP 1: SCOPE CRITERIA

Please use this sheet to indicate which criteria are deemed applicable and how important they are.
Please use the following values: high, medium, low or none using the dropdown menu in Column D (grey areas).

Nr.	CRITERION	Importance for IMPACT ASSESSMENT	Suggested value
Employment and labour markets			
1	Effect on total employment	high	*high*
2	Effect on turnover of workers	high	*high*
Working conditions			
3	Effect on wages, wage setting mechanisms or labour costs	high	*high*
4	Effect on employment protection	high	*high*
5	Effect on work organisation	high	*high*
6	Effect on the exercise of labour standards	none	*none*
7	Effect on access to vocational training and /or advice on career development	high	*medium*
8	Effect on occupational health and safety	high	*high*
9	Effect on social dialogue	none	*none*
10	Effect on 'just culture'	high	*medium*
Governance, participation and good administration			
11	Effect on the autonomy of social partners in the areas for which they are competent (e.g.	none	*none*
12	Effects on information and consultation rights	none	*none*
Access to and effects on social protection, health and educational systems			
13	Effect on the level of education	high	*medium*
14	Effect on the mobility of workers	high	*high*
Public health & safety			
15	Effect on lifestyle-related determinants of health such as diet, physical activity or use of t	none	*none*
16	Effect on position of specific groups of works	none	*none*

The second part of the scoping exercise involves determining the relevant sub-sectors of aviation for which the impacts need to be assessed. Also, in this case the scoping will be determined by the subject and content of the proposed EASA regulation. In the scoping, all sub-sectors of aviation or a selection of the following sub-sectors can be identified:

- Air operations (in particular pilots, crew);
- Air traffic management (in particular ATCOs, ATSEPs);
- Airside handling (in particular security, ground handling);
- Aircraft manufacturing;
- Aircraft maintenance;
- National aviation authorities;
- EASA.

To identify these sectors tab "Step 1A" of the Excel sheet can be used (see Figure 4.2).

Figure 4.2: Identification of the relevant sub-sectors of aviation

Nr.	CRITERION	Sectors
Employment and labour markets		
1	Effect on total employment	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

Step 2: Selecting the relevant indicators

As explained in chapter 3, not every criterion is deemed suitable for ex ante impact assessment, as those criteria are not directly affected by EASA rule making. For each of the 10 remaining one or more indicators have been defined, which can be used for the impact assessment. Not for all of these indicators quantification is (presently) possible; some are defined in qualitative terms, requiring an informed judgement by the assessor. .

In chapter 3, for some criteria more than one indicator has been defined. The purpose of the second step of using the framework is to identify whether all of these indicators need to be taken into account, or whether some need to be excluded, as they are not relevant for the specific case of the impact assessment. For those that are deemed relevant, relative weights can be set, if desired.

Note that this step is only relevant for those criteria for which more than one indicator has been defined, e.g. the criteria 3, 5, 8, 10 and 14.

For each individual indicator in these criteria the level of relevance can be set (high, medium, low or no relevance), by using the dropdown menu in the tab "Step 2" as shown in Figure 4.3 for indicator 1A. The relevance of all other indicators is set at the level of importance as defined for the specific criterion in Step 1. Figure 4.3 shows how this works out for the two indicators (3A and 3B) that are defined for criterion 3, in case a distinction is made in their relative relevance (low and high respectively).

Figure 4.3: Defining the relevance of individual indicators (tab Step 2)

STEP 2: SELECT INDICATORS

Please use this sheet to select the relevant indicators for the impact assessment, for those criteria for which several indicators are defined. The value of indicators that are un.
Please use the following values: high, medium, low or none in Column D using the drop down menu (grey areas).

INDICATOR NR.		*Importance CRITERION*	*Relevance INDICATOR*	*Comment*
Employment and labour markets				
1	1A Change in number of fte	high	high	*Equal to importance criterion set in Step 1*
2	2A Degree to which function levels change due to change in tasks of function	high	high	*Equal to importance criterion set in Step 1*
Working conditions				
3	3A Change in net income per fte	high	low	
	3B Change in maximum retirement age	high	high	

Step 3: Defining the weights

In the third step, the weights of the criteria and indicators are defined. For transparency reasons the use of a uniform 5-points scale throughout the instrument, for all weights and scores is proposed. These scales are only a suggestion and can be adjusted by the user of the framework, if so desired. The following weights are proposed as default weights:

Table 4.3: Relative weights for importance / relevance of criteria and indicators

Assessment of importance/relevance	Relative weight
High	4
Medium	3
Low	2
None	0

Thus, a criterion that is deemed important gets a weight of 4, while another criterion with medium importance gets a weight of 3.

The weights for criteria and indicators are defined in tab "Step 3" of the Excel sheet, as shown in the figure below.

Figure 4.4: Definition of weights for criteria and indicators (tab "Step 3")

high	4
medium	3
low	2
none	0

Step 4: Assessing the direction and size of the impact for the policy options

Having established the scope of the impact assessment in terms of relevant criteria, the relevant subsectors of aviation and the indicators to be used, the next step in the impact assessment involves the assessment of the expected impact of the options for the proposed EASA regulation. In this step for each policy options, the assessed impact needs to be established for the relevant sub-sector(s) of aviation sector and can be imported in the spreadsheet.

In scoring the impacts, the scales as described in chapter 3 are proposed to be used as a guideline. Using the scales for each individual indicator a score can be assessed that ranges between a very high positive impact (score: +5) and a very high negative impact (score: - 5).

In the Excel sheet, the score is defined in two steps. First, the direction of the impact assessed (being either: positive, negative of neutral). Second the size of the impact is assessed using the fie point scale: very high, high, medium, low, very low. This means that a score "positive, low" translates in a quantitative score of +2.

The scores can be put in tabs "Step 4" of the spreadsheet, as is shown in Figure 4.5. There are identical tabs provided for three policy options. The columns that show the importance of the criterion and the relevance of the indicator are based on decisions made in previous steps.

Figure 4.5: Scoring the impacts per indicator for policy option 1 (tab "Step 4 Option 1")

STEP 4: SCORE IMPACTS POLICY OPTION OPTION 1

Set name of the policy option in cell G1.

*Please use this sheet to score the indicators that are deemed relevant for the criteria deemed important. Use the grey cells to score Direction: **po***

Add in Column I the sub-sectors for which the score applies: All / Air operations/ air traffic management/ landside handling/ manufacturng / me

NR.	CRITERION	INDICATOR	Importance CRITERION	Relevance INDICATOR	Direction Impact	Size Impact
Employment and labour markets						
1	Effect on total employment	1A Change in number of fte	high	high	positive	low
2	Effect on turnover of workers	2A Degree to which function levels change	high	high	positive	low

Step 5: Calculating the overall score

The last step involves the calculation of the overall score on social impacts for the three policy options. This score is based on the input given in the previous steps. This input is first used to calculate one score per criterion. This score is a weighted average of the scores for the various indicators that are defined in step 2 as best describing the impact on that specific criterion.
In this way, the overall score is made independent of the number of indicators identified for that criterion. The maximum score that can be shown is +5 or -5, independent whether only one indicator is defined or five indicators are defined for one criterion.

The scores per criterion are subsequently used to calculate the overall score for the relevant social impacts. Also for this step the information of steps 1 -3 is used.

This step results in a list of scores and weights per criterion. Figure 4.6 gives an example of the overview that can be seen in tab "Result" of the Excel sheet. It is emphasized that in this example random weights and scores have been applied.

Figure 4.6: Example overview of scores and weights per social impact criterion (NB random weights and scores are used)

NR	RESULT PER SOCIAL IMPACT CRITERION		POLICY OPTIONS OPTION 1	OPTION 2	OPTION 3
Employment and labour markets		***Weight***	***Score***	***Score***	***Score***
1	*Effect on total employment*	10,81%	2,0	-3,0	0,0
2	*Effect on turnover of workers*	10,81%	2,0	-1,0	0,0
Working conditions					
3	*Effect on wages, wage setting mechanisms or labour costs*	10,81%	3,0	-3,0	0,0
4	*Effect on employment protection*	10,81%	2,0	-2,0	0,0
5	*Effect on work organisation*	10,81%	2,5	-2,5	0,0
6	*Effect on the exercise of labour standards*	0,00%			
7	*Effect on access to vocational training and /or advice on career development*	8,11%	2,0	-2,0	0,0
8	*Effect on occupational health and safety*	10,81%	2,0	-2,0	0,0
9	*Effect on social dialogue*	0,00%			
10	*Effect on 'just culture'*	8,11%	2,0	-2,0	0,0
Governance, participation and good administration					
11	*Effect on the autonomy of social partners in the areas for which they are competent (e.g. the right of collec*	0,00%			
12	*Effects on information and consultation rights*	0,00%			
Access to and effects on social protection, health and educational systems					
13	*Effect on the level of education*	8,11%	2,0	-2,0	0,0
14	*Effect on the mobility of workers*	10,81%	2,0	-2,0	0,0
Public health & safety					
15	*Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, o*	0,00%			
16	*Effect on position of specific groups of works*	0,00%			
	TOTAL	100,00%			
	RESULTING SOCIAL IMPACT SCORE		2,2	-2,2	0,0
	Given the weights and scores given, using the scale indicated in Step 3				

Using the weights and scores the overall score can be calculated, which in the particular case of Figure 4.6 is 2.2 for option 1, -2.2 for option 2 and 0.0 for option 3 (on a scale ranging from -5 to +5).

4.3 Recommendations for further steps

In this report and the associated Excel sheet, we present a methodology that can be applied by EASA in comparing various policy options on their social impacts. As shown at various stages information gaps were encountered in translating criteria into SMART indicators and in measuring the indicators. Further, at various points Ecorys has made choices that may be different if more experience is gathered with application of the framework. Below follow recommendations for further actions by the Agency.

- It appeared not easy to develop appropriate scales for the impacts of indicators. More research, in coordination with stakeholders could help to develop new scales for indicators and/or to improve on the proposed scales. In addition, collection of sector wide data will benefit the design and improvement of impact scales. These could be done in connection with setting the baseline for social risks for the sector;
- In using the developed framework, improvements may be identified, such as amending the list of criteria or indicators. It is recommended to evaluate the use of the framework after it has been piloted in some cases and identify such improvement options before considering an update;
- As indicated in chapter 3, various indicators have been identified that presently cannot be used in ex ante impact assessment but could help in the monitoring and the evaluation of the impacts of regulations. It is suggested to define a monitoring framework for social indicators that could support the Agency in accordance with eh requirements of the EASA Basic Regulation (EU) 2018/1139 Article 89.

Socio-economic indicators following the ECORYS study

STEP 1: SCOPE CRITERIA

Please use this sheet to indicate which criteria are deemed applicable and how important they are.
Please use the following values: high, medium, low or none using the dropdown menu in Column D (grey areas).

Nr.	CRITERION	Importance for IMPACT ASSESSMENT	Suggested value	Comment
Employment and labour markets				
1	Effect on total employment	high	*high*	
2	Effect on turnover of workers	high	*high*	
Working conditions				
3	Effect on wages, wage setting mechanisms or labour costs	high	*high*	
4	Effect on employment protection	high	*high*	
5	Effect on work organisation	high	*high*	
6	Effect on the exercise of labour standards	none	*none*	*No appropriate indicator available for Impact Assessment*
7	Effect on access to vocational training and /or advice on career development	medium	*medium*	
8	Effect on occupational health and safety	high	*high*	
9	Effect on social dialogue	none	*none*	*No appropriate indicator available for Impact Assessment*
10	Effect on 'just culture'	medium	*medium*	
Governance, participation and good administration				
11	Effect on the autonomy of social partners in the areas for which they are competent (e.g. the right	none	*none*	*No appropriate indicator available for Impact Assessment*
12	Effects on information and consultation rights	none	*none*	*No appropriate indicator available for Impact Assessment*
Access to and effects on social protection, health and educational systems				
13	Effect on the level of education	medium	*medium*	
14	Effect on the mobility of workers	high	*high*	
Public health & safety				
15	Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, al	none	*none*	*No appropriate indicator available for Impact Assessment*
16	Effect on position of specific groups of works	none	*none*	*No appropriate indicator available for Impact Assessment*

STEP 1A: SCOPE SECTOR

Idetify for which sub-sectors the criteria need to be assessed

Nr.	*CRITERION*	*Sectors*
Employment and labour markets		
1	Effect on total employment	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
2	Effect on turnover of workers	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Working conditions		
3	Effect on wages, wage setting mecha	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
4	Effect on employment protection	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
5	Effect on work organisation	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
6	Effect on the exercise of labour stand	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
7	Effect on access to vocational training	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
8	Effect on occupational health and saf	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
9	Effect on social dialogue	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
10	Effect on 'just culture'	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Governance, participation and good administration		
11	Effect on the autonomy of social part	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
12	Effects on information and consultati	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Access to and effects on social protection, health and educational systems		
13	Effect on the level of education	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
14	Effect on the mobility of workers	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Public health & safety		
15	Effect on lifestyle-related determinan	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
16	Effect on position of specific groups o	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

STEP 2: SELECT INDICATORS

Please use this sheet to select the relevant indicators for the impact assessment, for those criteria for which several indicators are defined. The value of indicators that are unique to a criterion the value set in Step 1 is taken.
Please use the following values: high, medium, low or none in Column D using the drop down menu (grey areas).

NR.	INDICATOR	Importance CRITERION	Relevance INDICATOR	Comment
Employment and labour markets				
1	1A Change in number of employees	high	high	*Equal to importance criterion set in Step 1*
2	2A Degree to which function levels change due to change in tasks of function	high	high	*Equal to importance criterion set in Step 1*
Working conditions				
3	3A Change in net income per fte	high	low	
	3B Change in maximum retirement age	high	high	
4	4A Change in percentage of employees in atypical employment	high	high	*Equal to importance criterion set in Step 1*
5	5A Change in average number of hours worked	high	medium	
	5B Change in workload	high	medium	
6	6A Change in distribution of nationality of labour contracts	none	none	*Equal to importance criterion set in Step 1*
7	7A Change in % of workers receiving vocational training / career development advice	medium	medium	*Equal to importance criterion set in Step 1*
8	8A Change in number of work related safety incidents	high	medium	
	8B Change in absence rate due to sickness	high	none	
	8C Change in occurrence of "provisional inability"	high	medium	
9	9A Change in union representation	none	none	*Equal to importance criterion set in Step 1*
10	10A Change in likelihood of occurrences being reported	medium	medium	
	10B Change in likelihood of actions following the reporting of just-culture	medium	medium	
	10C Change in level of privacy protection	medium	medium	
Governance, participation and good administration				
11	11A Existence of social impact mitigation system (similar to safety management system)	none	none	
	11B Change in the rights of unions to organise actions (e.g. strikes)	none	none	
12	12A Change in the level of right of information and/or consultation in organisations, companies	none	none	*Equal to importance criterion set in Step 1*
Access to and effects on social protection, health and educational systems				
13	13A Change in education level requirements for functions	medium	medium	*Equal to importance criterion set in Step 1*
14	14A % of workers for which principal place of employment changes within country / administrative region	high	none	
	14B % of workers for which principal place of employment changes outside country / administrative region	high	none	
	14C Cross-border mobility within EU	high	high	
Public health & safety				
15	15A Change in use of (peer) support programmes (e.g. to combat addictions, private life)	none	none	*Equal to importance criterion set in Step 1*
16	16A Change in access to jobs for specific groups of workers groups (disability; gender; age).	none	none	*Equal to importance criterion set in Step 1*

STEP 3: DEFINE WEIGHTS AND SCALES

1 *Please use the set below to give relative weights per category*

Weights importance criteria (suggested weights using scale 0-5)

high	4
medium	3
low	2
none	0

2 *Please use the set below to give relative weights for the level of relevance of indicators(weights in line with weights for importance)*

Weights relevance indicators (suggested weight using scale 0-5)

high	4
medium	3
low	2
none	0

3 *Please use the values below to define the scale of the indicators (e.g. from 1 to 5 means that positive impacts have a scale of +1 to +5, negative impacts from -5 to -1)*

Scale of the impact (suggested scale: 1 to 5)

very high	5
high	4
medium	3
low	2
very low	1
neutral	0

Direction of the impact

positive
neutral
negative

STEP 4: SCORE IMPACTS POLICY OPTION OPTION 1

Set name of the policy option in cell G1.

*Please use this sheet to score the indicators that are deemed relevant for the criteria deemed important. Use the grey cells to score Direction: **positive/neutral/negative** (column G) and Size: very high / high / medium / low / very low or leave it open (Column H).*

Add in Column I the sub-sectors for which the score applies: All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

NR.	CRITERION	INDICATOR	Importance CRITERION	Relevance INDICATOR	Direction Impact	Size Impact	Relevant SECTOR
Employment and labour markets							
1	Effect on total employme	1A Change in number of employees	high	high	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
2	Effect on turnover of wor	2A Degree to which function levels	high	high	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Working conditions							
3	Effect on wages, wage se	3A Change in net income per fte	high	low	positive	very high	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		3B Change in maximum retirement	high	high	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
4	Effect on employment pr	4A Change in percentage of employ	high	high	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
5	Effect on work organisati	5A Change in average number of hc	high	medium	positive	medium	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		5B Change in workload	high	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
6	Effect on the exercise of I	6A Change in distribution of nation	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
7	Effect on access to vocati	7A Change in % of workers receivin	medium	medium	positive	high	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
8	Effect on occupational he	8A Change in number of work relat	high	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8B Change in absence rate due to si	high	none	neutral	very high	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8C Change in occurrence of "provis	high	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
9	Effect on social dialogue	9A Change in union representation	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
10	Effect on 'just culture'	10A Change in likelihood of occurre	medium	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10B Change in likelihood of actions	medium	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10C Change in level of privacy prote	medium	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Governance, participation and good administration							
11	Effect on the autonomy c	11A Existence of social impact mitig	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		11B Change in the rights of unions t	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
12	Effects on information an	12A Change in the level of right of i	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Access to and effects on social protection, health and educational systems							
13	Effect on the level of edu	13A Change in education level requ	medium	medium	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
14	Effect on the mobility of	14A % of workers for which princip	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14B % of workers for which princip	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14C Cross-border mobility within El	high	high	positive	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Public health & safety							
15	Effect on lifestyle-related	15A Change in use of (peer) suppor	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
16	Effect on position of spec	16A Change in access to jobs for sp	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

STEP 4: SCORE IMPACTS POLICY OPTION OPTION 2

Set name of the policy option in cell G1.

Please use this sheet to score the indicators that are deemed relevant for the criteria deemed important. Use the grey cells to score Direction: ***positive/neutral/negative*** *(column G) and Size: very high / high / medium / low / very low or leave it open (Column H).*

Add in Column I the sub-sectors for which the score applies: All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

NR.	CRITERION	INDICATOR	Importance CRITERION	Relevance INDICATOR	Direction Impact	Size Impact	Relevant SECTOR
Employment and labour markets							
1	Effect on total employment	1A Change in number of employees	high	high	negative	medium	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
2	Effect on turnover of workers	2A Degree to which function levels change due t	high	high	negative	very low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Working conditions							
3	Effect on wages, wage setting mec	3A Change in net income per fte	high	low	negative	very high	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		3B Change in maximum retirement age	high	high	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
4	Effect on employment protection	4A Change in percentage of employees in atypic	high	high	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
5	Effect on work organisation	5A Change in average number of hours worked	high	medium	negative	medium	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		5B Change in workload	high	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
6	Effect on the exercise of labour sta	6A Change in distribution of nationality of labou	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
7	Effect on access to vocational train	7A Change in % of workers receiving vocational t	medium	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
8	Effect on occupational health and :	8A Change in number of work related safety inci	high	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8B Change in absence rate due to sickness	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8C Change in occurrence of "provisional inability	high	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
9	Effect on social dialogue	9A Change in union representation	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
10	Effect on 'just culture'	10A Change in likelihood of occurrences being re	medium	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10B Change in likelihood of actions following the	medium	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10C Change in level of privacy protection	medium	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Governance, participation and good administration							
11	Effect on the autonomy of social p	11A Existence of social impact mitigation system	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		11B Change in the rights of unions to organise ac	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
12	Effects on information and consult	12A Change in the level of right of information a	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Access to and effects on social protection, health and educational systems							
13	Effect on the level of education	13A Change in education level requirements for	medium	medium	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
14	Effect on the mobility of workers	14A % of workers for which principal place of en	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14B % of workers for which principal place of en	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14C Cross-border mobility within EU	high	high	negative	low	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Public health & safety							
15	Effect on lifestyle-related determir	15A Change in use of (peer) support programme	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
16	Effect on position of specific group	16A Change in access to jobs for specific groups	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

STEP 4: SCORE IMPACTS POLICY OPTION OPTION 3

Set name of the policy option in cell G1.

Please use this sheet to score the indicators that are deemed relevant for the criteria deemed important. Use the grey cells to score Direction: ***positive/neutral/negative*** *(column G) and Size: very high / high / medium / low / very low or leave it open (Column H).*

Add in Column I the sub-sectors for which the score applies: All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

NR.	CRITERION	INDICATOR	Importance CRITERION	Relevance INDICATOR	Direction Impact	Size Impact	Relevant SECTOR
Employment and labour markets							
1	Effect on total employment	1A Change in number of employees	high	high	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
2	Effect on turnover of workers	2A Degree to which function levels change due t	high	high	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Working conditions							
3	Effect on wages, wage setting mec	3A Change in net income per fte	high	low	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		3B Change in maximum retirement age	high	high	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
4	Effect on employment protection	4A Change in percentage of employees in atypic	high	high	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
5	Effect on work organisation	5A Change in average number of hours worked	high	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		5B Change in workload	high	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
6	Effect on the exercise of labour sta	6A Change in distribution of nationality of labou	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
7	Effect on access to vocational train	7A Change in % of workers receiving vocational t	medium	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
8	Effect on occupational health and :	8A Change in number of work related safety inci	high	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8B Change in absence rate due to sickness	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		8C Change in occurrence of "provisional inability	high	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
9	Effect on social dialogue	9A Change in union representation	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
10	Effect on 'just culture'	10A Change in likelihood of occurrences being re	medium	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10B Change in likelihood of actions following the	medium	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		10C Change in level of privacy protection	medium	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Governance, participation and good administration							
11	Effect on the autonomy of social p	11A Existence of social impact mitigation system	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		11B Change in the rights of unions to organise ac	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
12	Effects on information and consult	12A Change in the level of right of information a	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Access to and effects on social protection, health and educational systems							
13	Effect on the level of education	13A Change in education level requirements for	medium	medium	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
14	Effect on the mobility of workers	14A % of workers for which principal place of em	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14B % of workers for which principal place of em	high	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
		14C Cross-border mobility within EU	high	high	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
Public health & safety							
15	Effect on lifestyle-related determir	15A Change in use of (peer) support programme	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA
16	Effect on position of specific group	16A Change in access to jobs for specific groups	none	none	neutral	neutral	All / Air operations/ air traffic management/ landside handling/ manufacturng / meaintenance / NAA's / EASA

NR	RESULT PER SOCIAL IMPACT CRITERION		POLICY OPTIONS OPTION 1	OPTION 2	OPTION 3
Employment and labour markets		***Weight***	***Score***	***Score***	***Score***
1	*Effect on total employment*	10,81%	2,0	-3,0	0,0
2	*Effect on turnover of workers*	10,81%	2,0	0,0	0,0
Working conditions					
3	*Effect on wages, wage setting mechanisms or labour costs*	10,81%	3,0	-3,0	0,0
4	*Effect on employment protection*	10,81%	2,0	-2,0	0,0
5	*Effect on work organisation*	10,81%	2,5	-2,5	0,0
6	*Effect on the exercise of labour standards*	0,00%			
7	*Effect on access to vocational training and /or advice on career development*	8,11%	4,0	-2,0	0,0
8	*Effect on occupational health and safety*	10,81%	2,0	-2,0	0,0
9	*Effect on social dialogue*	0,00%			
10	*Effect on 'just culture'*	8,11%	2,0	-2,0	0,0
Governance, participation and good administration					
11	*Effect on the autonomy of social partners in the areas for which they are competent (e.g. the right of collective barga*	0,00%			
12	*Effects on information and consultation rights*	0,00%			
Access to and effects on social protection, health and educational systems					
13	*Effect on the level of education*	8,11%	2,0	-2,0	0,0
14	*Effect on the mobility of workers*	10,81%	2,0	-2,0	0,0
Public health & safety					
15	*Effect on lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs*	0,00%			
16	*Effect on position of specific groups of works*	0,00%			
	TOTAL	100,00%			
	RESULTING SOCIAL IMPACT SCORE		2,3	-2,1	0,0
	Given the weights and scores given, using the scale indicated in Step 3				

					OPTION 1		OPTION 2		OPTION 3							OPTION 1	OPTION 2	OPTION 3
				total score:	2,32		-2,05		-			High/medium/low/none	0-100%			-5 tot +5		
Nr.	Criteria	*Importance CRITERION*	*Weight*	*Relative weight*	*Score*		*Score*		*Score*		*Indicator(s)*	*Relevance*	*Weight*	*Rel weight*		*Score*	*Score*	*Score*
Employment and labour markets																		
1	Effect on total employment	high	4	10,81%	2,00	0,22	-3,00	-0,32	-	-	1A Change in number of employees	high	4	100%		2	-3	0
2	Effect on turnover of workers	high	4	10,81%	2,00	0,22	-	-	-	-	2A Degree to which function levels change due to change in tasks of function	high	4	100%		2	0	0
Working conditions																		
3	Effect on wages, wage setting mechanisms or labour costs	high	4	10,81%	3,00	0,32	-3,00	-0,32	-	-	3A Change in net income per fte	low	2	33%		5	-5	0
											3B Change in maximum retirement age	high	4	67%		2	-2	0
4	Effect on employment protection	high	4	10,81%	2,00	0,22	-2,00	-0,22	-	-	4A Change in percentage of employees in atypical employment	high	4	100%		2	-2	0
5	Effect on work organisation	high	4	10,81%	2,50	0,27	-2,50	-0,27	-	-	5A Change in average number of hours worked	medium	3	50%		3	-3	0
											5B Change in workload	medium	3	50%		2	-2	0
6	Effect on the exercise of labour standards	none	0	0,00%	-	-	-	-	-	-	6A Change in distribution of nationality of labour contracts	none	0	0%		0	0	0
7	Effect on access to vocational training and /or advice on career develc	medium	3	8,11%	4,00	0,32	-2,00	-0,16	-	-	7A Change in % of workers receiving vocational training / career development advice	medium	3	100%		4	-2	0
8	Effect on occupational health and safety	high	4	10,81%	2,00	0,22	-2,00	-0,22	-	-	8A Change in number of work related safety incidents	medium	3	50%		2	-2	0
											8B Change in absence rate due to sickness	none	0	0%		0	0	0
											8C Change in occurrence of "provisional inability"	medium	3	50%		2	-2	0
9	Effect on social dialogue	none	0	0,00%	-	-	-		-		9A Change in union representation	none	0	0%		0	0	0
10	Effect on 'just culture'	medium	3	8,11%	2,00	0,16	-2,00	-0,16	-	-	10A Change in likelihood of occurrences being reported	medium	3	33%		2	-2	0
											10B Change in likelihood of actions following the reporting of just-culture	medium	3	33%		2	-2	0
											10C Change in level of privacy protection	medium	3	33%		2	-2	0
Governance, participation and good administration																		
11	Effect on the autonomy of social partners in the areas for which they	none	0	0,00%	-	-	-	-	-	-	11A Existence of social impact mitigation system (similar to safety management system)	none	0	0%		0	0	0
											11B Change in the rights of unions to organise actions (e.g. strikes)	none	0	0%		0	0	0
12	Effects on information and consultation rights	none	0	0,00%	-	-	-	-	-	-	12A Change in the level of right of information and/or consultation in organisations, companies	none	0	0%		0	0	0
Access to and effects on social protection, health and educational systems																		
13	Effect on the level of education	medium	3	8,11%	2,00	0,16	-2,00	-0,16	-	-	13A Change in education level requirements for functions	medium	3	100%		2	-2	0
14	Effect on the mobility of workers	high	4	10,81%	2,00	0,22	-2,00	-0,22	-	-	14A % of workers for which principal place of employment changes within country / administrative region	none	0	0%		0	0	0
											14B % of workers for which principal place of employment changes outside country / administrative region	none	0	0%		0	0	0
											14C Cross-border mobility within EU	high	4	100%		2	-2	0
Public health & safety																		
15	Effect on lifestyle-related determinants of health such as diet, physica	none	0	0,00%	-	-	-	-	-	-	15A Change in use of (peer) support programmes (e.g. to combat addictions, private life)	none	0	0%		0	0	0
16	Effect on position of specific groups of works	none	0	0,00%	-	-	-	-	-	-	16A Change in access to jobs for specific groups of workers groups (disability; gender; age).	none	0	0%		0	0	0