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Consultation on the 2021 EC-OECD Science, Technology and Innovation Policy (STIP) Survey

This document presents a proposal for revisions to the EC-OECD STIP Survey in view of the upcoming 2021 edition. CSTP delegates are asked to review the proposed changes and to send any feedback by 26 March 2021. Based on this feedback, the survey will be circulated to delegates in early April for their final approval. The OECD Secretariat plans to begin administering the survey by mid-April and to close it by the end of June 2021.

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Consultation on the 2021 edition of the EC-OECD Science, Technology and Innovation Policy (STIP) Survey

1. Since 2015, the OECD's Directorate for Science, Technology and Innovation and the European Commission (EC) Directorate-General for Research & Innovation (DG R&I) have joined forces to operate a joint science, technology and innovation policy (STIP) biennial survey. This joint approach is part of wider efforts to streamline country monitoring and reduce the burden on countries to report changes in their STI policies and governance arrangements. Countries' responses to the survey constitute the main, broadest and most recent source of harmonised country-specific STI policy information available anywhere. More than 50 countries participated in the 2019 survey, representing more than 95% of the world's public spending on R&D and innovation.

2. This note outlines the proposed revisions to the EC-OECD STIP survey for the 2021 edition. These revisions can be grouped into three components that structure the survey: i) the survey's questions (i.e. the policy themes covered in the STIP Survey); ii) the standard fiche used in the survey to collect information on policy initiatives; and iii) the taxonomy used to describe the policy instruments deployed by policy initiatives. The proposed changes are detailed in the Annex. This note also outlines the 2021 survey's next steps and its timetable.

3. CSTP delegates are requested to review this proposal and to send any feedback by 26 March 2021 to STIPolicy.Data@oecd.org. The planned revisions have also been sent to delegates of the EC European Research Area Committee (ERAC) for their feedback in a parallel consultation. Under the current schedule, the OECD Secretariat plans to begin administering the survey by mid-April and to close it by the end of June 2021.[1]

1. Background

4. As part of a wide-ranging initiative to improve the monitoring and analysis of countries' STI policies, the 2017 edition of the EC/OECD STIP Survey saw major revisions in its methodology for data collection. The new approach reduced the reporting burden on countries and significantly raised the database's usability for analysis. In particular, the survey saw the number of questions significantly reduced, and it was, for the first time, administered through a dedicated online survey application. It also made greater use of standard fiches and taxonomies to harmonise data. Countries' responses to the EC-OECD STI Policy survey are the main data source for the EC-OECD STIP Compass (http://stip.oecd.org/).

5. The survey approach introduced in 2017 was designed to remain stable over time, meaning there would be few changes to questions and taxonomies in subsequent surveys without good reason. This means that data submitted in one edition of the survey is used by the EC and OECD to prefill the next edition, with country respondents asked to validate this and report new developments. This stability reduces the reporting burden on countries and will eventually lead to a time series of reported national STI policies. Nevertheless, countries' experiences in responding to the survey, as well as the OECD's and EC's curation and use of the data in analysis, leads to suggestions for improvements. Revisions have been kept to a minimum, however, and countries that already have good quality data will only require National

[1] Prior editions of the STIP survey were administered in the latter part of the year. At the request of the EC and the suggestion of several countries, the timeline for the 2021 edition of the survey has been brought forward to Q2 of the year. This timing will better align the availability of the survey's results with the EC's data needs for the European Semester process.

Contact Points (NCPs) to take note of a few changes when validating their prefilled data information. These revisions are described below.

2. Changes to the survey questionnaire

6. The STIP Survey was streamlined and shortened from 102 questions in the 2015 edition to 69 in 2017 and then further to 57 in 2019. Under the current proposal, the number of questions in the 2021 edition of the survey increases only slightly to 59. The questionnaire is structured around six "core" policy areas: i) Governance; ii) Public research system; iii) Innovation in firms and innovative entrepreneurship; iv) Science-industry knowledge transfer and sharing; v) Human resources for innovation; and vi) Research and innovation for society.

7. In the 2021 edition, the "core areas" of the survey host 52 questions, coinciding with frameworks commonly used in STI policy analysis. Of these, 46 questions ask NCPs and other country respondents to submit the main policy initiatives addressing a specific policy theme (each policy theme mapping onto a question). Six questions ask NCPs to describe the main issues of debate around each of the policy areas.

8. Besides the "core areas", the survey includes one or two edition-specific question modules covering policy issues of particular interest to the OECD's and EC's ongoing work programmes. The 2019 edition of the survey included a single module on "Emerging trends in STI policy" covering themes such as AI policy, the ethics of emerging technologies and mission-oriented innovation policy. The EC and OECD propose the 2021 survey to include two edition-specific modules, one on COVID-19 and another on the European Research Area (ERA). This proposal has two important implications relating to prior data collection arrangements (Box 1).

9. More specifically, the following changes to the 2019 survey's questions are proposed for the 2021 edition (c.f. pages 7-10 in the Annex).

- As the 2021 survey will be piloted across several regions, references to country and/or national policy have been removed across questions. However, when administered at the national level, the online questionnaire will explicitly ask respondents to report only *national* policies. Similarly, when completed at the regional level, the questionnaire will request respondents to report policies that are only administered by their own region.
- Two questions have been edited to improve their wording and raise the quality of the data reported.
- The question on "*Digital skills for researchers*" under the "Human resources for research and innovation" policy area has been removed in the 2021 survey. This question, introduced in the 2019 edition, only gathered 34 policy initiatives, most of which were already reported under other questions in the survey. By comparison, other questions in the same policy area gather information on between 150 and 250 policy initiatives.
- Two questions from the 2019 edition-specific module "Emerging trends in STI policy" have been moved to the "Research and innovation for society" policy area of the core part of the 2021 survey: i) on *mission-oriented innovation policies* (which has been slightly reformulated); and ii) on the *ethics of emerging technologies*. These questions gathered data with a certain level of quality in the 2019 edition and continue to be of high policy interest.
- A new question will be added to the "Research and innovation for society" policy area of the core survey, i.e. *What policy initiatives, if any, has your country introduced to support research and innovation for clean energy and net-zero ambitions?* This question will provide the EC and OECD with an additional source of information feeding into respective work on the climate emergency and

green energy transitions. In particular, it focuses on one of the flagships areas for investments and reforms of the EC's new Recovery and Resilience Facility.[2]

Box 1. Changes to prior data collection arrangements

Questions in the 2019 STIP module for the OECD AI Observatory

The 2019 STIP survey had a question specific to the OECD's AI Observatory (http://oecd.ai/), namely on *National AI Policy*. Delegates of the Committee on Digital Economy Policy (CDEP) were in charge of reporting AI-relevant policies in this question. While this allowed the Observatory to leverage the STIP Compass infrastructure, it presented some limitations. In particular, the taxonomies used in the STIP survey are designed to capture essential information on STI policies, covering a wide breadth of topics without going into detail on specific policy issues or business sectors. This means that important features specific to AI policy cannot be reported using the STIP taxonomies. Moreover, certain parts of these taxonomies are redundant for purposes of collecting information on AI policies.

To overcome these limitations, the 2021 edition of the STIP survey will not include a question specific to AI policies. Rather, the OECD Secretariat will have a separate data collection exercise, which will be overseen and managed independently by CDEP. That being said, the OECD Secretariat will coordinate to ensure any information relevant to AI policy that is reported in the STIP survey is featured in OECD.AI. Likewise, the STIP Compass will also cite relevant AI policies where appropriate throughout the portal (e.g. national research programmes, support for AI adoption in firms, etc.).

The OECD Survey on STI Policy responses to COVID-19

The 2019 edition of the STIP survey was administered a few months before the pandemic. However, at the outset of the crisis governments started to introduce many ambitious STI policy initiatives across a wide range of areas. STI policies have played crucial roles in dealing with the COVID-19 crisis. For this reason, in March 2020 the OECD launched a separate survey to collect information on such policy efforts. The information was updated in October leveraging the STIP survey taxonomies and shortly after the OECD launched a new interactive database, the STIP COVID-19 Watch (see https://stip.oecd.org/covid/).

The largest share of policies reported in the COVID-19 survey were launched in the first half of last year. The bulk of these policies constituted emergency schemes funded to address the crisis. Since then, governments and public bodies have adapted their existing STI policies in the face of the pandemic. This suggests, on the one hand, that a separate survey is no longer needed and, on the other, that the 2021 survey should be adjusted to monitor how policies have been adapted to tackle COVID-19. Under the current proposal, the COVID-19 survey will be closed for the launch of the 2021 edition of the STIP survey, while COVID-19 data reported in the STIP survey 2021 will feed COVID-19 Watch, which will be maintained during 2021.

Note: See https://oecd-innovation-blog.com/2021/01/21/covid-19-science-innovation-policy-data-stip/ for more on the STIP COVID-19 Watch.

- The 2021 survey will have two edition-specific modules: "Countering impacts of COVID-19 on STI systems" with five questions. Four of these questions will be prefilled with the data collected in the

[2] See https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en.

OECD Survey on STI policy responses to COVID-19 (as discussed in Box 1). A separate module will have two questions focusing on ERA-related initiatives that aim to capture initiatives launched in the context of the EC's communication "A new ERA for Research and Innovation".[3] The questions in this module will be answered only by countries participating in the European Research Area.

3. Changes to the policy initiative fiche

10. NCPs and other country respondents use a single standardised fiche to describe and submit policy initiatives in answer to most of the STIP survey's questions. Each policy initiative has several fields to be filled in. The Secretariat plans to maintain the same fields as used in 2019, with only two foreseen changes (c.f. pages 10-11 in the Annex):

- Almost a year has passed since COVID-19 was declared a pandemic. The impacts of this crisis have brought shifts to practically all government policies, many of which have been redirected to tackling the virus or mitigating its impacts. For this reason, the 2021 survey will see a new field "*Any shifts related to COVID-19?*" (multiple choice selection) to capture any changes in policy initiatives that relate to the pandemic.
- Several NCPs have pointed out a limitation of past editions of the STIP survey in that it has been impossible to indicate a hierarchical relationship that some policy initiatives display. For instance, an overarching national strategy or programme may lead to the launch of smaller-scale initiatives that contribute towards achieving some of its goals. The new field "*Parent initiative (if applicable)*" will allow such relationships to be reported.

4. Policy instruments and facets

11. The STIP survey asks respondents to assign one or more policy instruments to the policy initiatives they declare. On selecting an instrument from the survey's taxonomy of instruments, the online interface prompts respondents with additional multiple-choice questions. These cover facets of the selected policy instrument that characterise its scope, design and implementation. These facets do not aim to provide a comprehensive characterisation of the instrument but rather cover some essential aspects. They ask for information that should be readily available to survey respondents familiar with the policy initiative.

12. The 2021 edition will introduce several small improvements to the policy instruments taxonomy and facets (c.f. pages 12-36 in the Annex). The OECD Secretariat reviewed the data reported in the 2019 survey to identify which facets and selectable options were prone to confusion or could be considered redundant. For example, NCPs and country respondents seldom (or never) chose a few of the selectable options. This has led to the proposed relabelling of three existing instruments and the editing or deletion of over 20 "facet choices" across all policy instruments in the 2021 edition of the survey.

5. Timeline and next steps

13. Figure 1 below displays the timeline leading to an October launch of the data collected by the 2021 survey on a relaunched STIP Compass portal.[4]

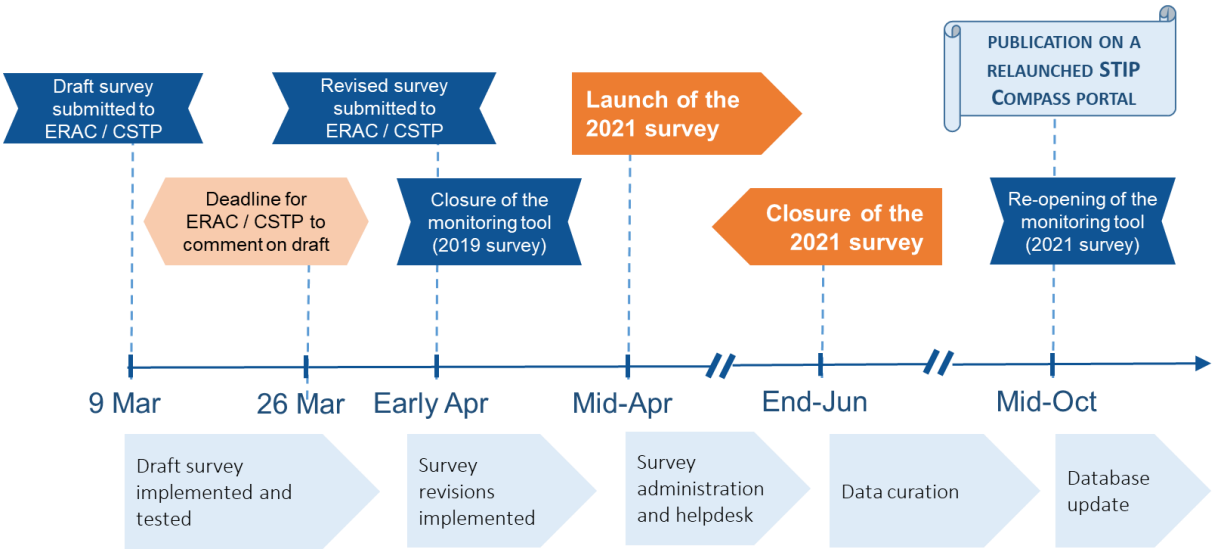
14. CSTP and ERAC delegates have until 26 March to comment on the survey's planned revisions. In the meantime, the OECD Secretariat will begin implementing and testing the revised survey in the online questionnaire tool. The survey will be further revised following any comments provided by delegates and

[3] See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A628%3AFIN.

[4] The design of the portal's interfaces is being refreshed and extended to better meet user needs and provide a more modern look-and-feel.

a final version will be sent to both committees in the first week of April. At this time, the monitoring tool that countries use to update the data reported in the 2019 survey will be closed. This will allow the 2021 survey to be prefilled with the latest data reported in the monitoring tool. The 2021 survey will be launched around mid-April and will be administered for 2.5 months, until the end of June. Under the current arrangements, CSTP delegates are responsible for designating the survey's NCPs for most countries.[5] However, ERAC delegates will also be invited to contribute in answering their country's survey.[6]

Figure 1. Timeline of the 2021 EC-OECD STIP Survey



15. The closure of the 2021 survey will mark the beginning of a round of data curation spanning the summer period and ending in late-September. While the OECD Secretariat will take the lead in curating the data, NCPs will be invited to participate in a peer review of one another's responses to the survey's six policy debate questions. Similar arrangements worked well in 2019, introducing a degree of peer learning that improved data quality. The data is scheduled for publication in October at a launch event (most likely online) that will coincide with the release of a revamped STIP Compass portal. This event will gather country delegates and analysts working in the STI policy field and could consist of a keynote presentation of the project's milestones and novelties, followed by a panel discussion with leading practitioners and academics. Once the database has been launched, the monitoring tool will be re-opened to allow countries to progressively improve and update their data.

[5] With the exception of countries that participate in the ERAC but do not take part in CSTP. In these cases, the ERAC delegate designates the NCP.

[6] For instance, ERAC delegates are well positioned to answer the two questions in the proposed ERA module.

Annex: Revisions to the EC-OECD STIP Survey, 2021 edition

1. This annex specifies the modifications described above. It shows proposed changes in red coloured text on top of the 2019 edition of the EC/OECD STIP Survey. Notes are in blue coloured text. Modifications are grouped into four survey components that correspond to the four sections that make up this annex: i) the survey's **questions** (i.e. the policy themes covered in the STIP Survey); ii) the **fiche used to describe the policy initiative**; iii) the taxonomy of **direct beneficiaries** (i.e. the target groups that policy initiatives address); and iv) the taxonomy of **policy instruments** employed by policy initiatives.

1. Questions in the survey (policy themes)

2. Table 1 lists the 2021 STIP survey's core questions organised into six policy areas in the order they will appear in the online survey tool. To keep the reporting burden on participating countries to a minimum, the questions included in this part of the 2021 survey remain largely the same as those in the 2019 edition.

Table 1. Core STIP Survey questions and STIP Compass policy themes

Policy Area	Policy Theme	Question in the 2017 EC-OECD STI Policy Survey
Governance	Governance debates	Briefly, what are the main ongoing issues of debate around how ~~national~~ STI policy is governed ~~in your country~~?
	~~National~~ STI plan or strategy	What strategies or plans exist, if any, to provide an overarching strategic direction to ~~national~~ STI policy?
	Horizontal policy coordination	What arrangements exist to support cross-government coordination in STI policy?
	Strategic policy intelligence	What arrangements or policy initiatives exist to strengthen the evidence base for STI policy-making and governance (besides evaluation and impact assessment)?
	Evaluation and impact assessment	What arrangements or governance structures exist to initiate, perform or encourage the use of STI evaluation and impact assessment?
	International STI governance policy	What arrangements exist to support the international governance of STI policy (e.g. joint strategies and agreements, horizontal coordination or regulatory oversight bodies)?
Public research system	Public research debates	Briefly, what are the main ongoing policy debates around government support for ~~your country's~~ the public research system?
	Public research strategies	What strategies, roadmaps or plans exist, if any, to provide strategic direction to ~~national~~ research policy?
	Competitive research funding	What are the main competitive schemes and programmes for funding research in universities and public research institutes?
	Non-competitive research funding	What are the main non-competitive schemes and programmes for funding research in universities and public research institutes?
	Third-party funding	What policy initiatives exist to promote ~~third-party~~ funding of public research from non-government sources?
	Structural change of the public research system	What policy initiatives exist, if any, to support or lead structural changes in the public research system?
	Open science and enhanced access to publications and research data	What policy initiatives exist to support open science and enhanced access to publications and research data?
	Research infrastructures ~~and large equipment~~	What are the main policy initiatives for funding ~~new~~ the construction and ~~existing~~ operation of research

		infrastructures ~~and large equipment~~?
	Internationalisation in public research	What are the main policy initiatives for promoting internationalisation in public research?
	~~Inter-~~Cross-disciplinary research	What are the main policy initiatives for promoting inter, multi and transdisciplinary research?
	High-risk high-reward research	What policy initiatives exist, if any, offering dedicated support to high-risk high-reward research?
	Research integrity and reproducibility	What are the main policy initiatives for promoting research integrity and reproducibility?
	Embedding sex- and gender-specific analysis in research	What policy initiatives exist to incorporate sex and gender specificities in research content (e.g. questioning gender assumptions in research methods)?
Innovation in firms and innovative entrepreneurship	Business innovation policy debates	Briefly, what are the main ongoing policy debates around government support to business innovation and innovative entrepreneurship?
	Business innovation policy strategies	What strategies or plans exist, if any, to strategically direct government ~~national policy~~ support to business innovation and/or innovative entrepreneurship?
	Financial support to business R&D and innovation	What are the main policy initiatives for providing financial support to business R&D and innovation?
	Non-financial support to business R&D and innovation	What are the main policy initiatives for providing non-financial support to business R&D and innovation?
	Access to finance for innovation	What policy initiatives exist to promote firms' access to finance for innovation?
	Entrepreneurship capabilities and culture	What policy initiatives exist to foster a spirit and culture of entrepreneurship in business or in individuals and to provide them with appropriate skills?
	Stimulating demand for innovation and market creation	What policy initiatives exist to stimulate demand for firms' innovations and to support market-creating innovation?
	Digital transformation of firms	What policy initiatives exist, if any, to help firms upgrade their organisational and technological capabilities to undergo digital transformation?
	Foreign direct investment	What policy initiatives exist to attract knowledge-intensive foreign direct investment and promote transfers to domestic firms?
	Targeted support to SMEs	What are the main policy initiatives specifically targeting research and innovation activities in SMEs?
	Targeted support to young innovative enterprises	What policy initiatives exist to provide support services to young innovative enterprises and start-ups?
Science-industry knowledge transfer and sharing	Transfer and linkages debates	Briefly, what are the main ongoing policy debates around ~~national~~ policy for science-industry knowledge transfer and sharing?
	Transfer and linkages strategies	What strategies or plans exist, if any, to strategically direct ~~national policy on~~ government support to ~~-~~knowledge transfer and sharing?
	Collaborative research and innovation	What are the main policy initiatives for promoting collaboration and co-creation for research and innovation?
	Cluster policies	What policy initiatives exist to promote geographical and/or thematic innovative clusters?
	Commercialisation of public research results	What policy initiatives exist to encourage commercialisation of public research results?
	Inter-sectoral mobility	What policy initiatives exist to encourage mobility of human resources between the public and private sectors?
	Intellectual property rights in public research	What policy initiatives exist to ensure intellectual property rights in public research are conducive to promoting innovation?
	STI human resources debates	Briefly, what are the main ongoing policy debates around government support for human resources for research and innovation?

Human resources for research and innovation	STI human resources strategies	What ~~national~~ strategies or plans exist, if any, to ~~foster~~ strategically direct government support to human resources for research and innovation ~~in your country~~?
	STEM skills	What are the main policy initiatives for nurturing general STEM skills?
	Doctoral and postdoctoral researchers	What policy initiatives exist to specifically support doctoral and postdoctoral research and education?
	Research careers	What policy initiatives exist to make research careers more attractive?
	~~Digital skills for researchers~~	~~What policy initiatives exist, if any, to help ensure researchers will have the necessary skills to drive and reap the benefits of the digitalisation of science?~~
	International mobility of human resources	What policy initiatives exist to encourage international mobility of the highly skilled?
	Gender balance and inclusiveness	What policy initiatives exist to promote the participation of women and other under-represented groups in research and innovation activities?
Research and innovation for society	Policy debates on innovation for societal challenges	Briefly, what are the current main policy debates around how ~~national~~ policy for research and innovation can help address societal challenges? ~~If applicable, please elaborate on how the Sustainable Development Goals (SDGs) are being incorporated into STI policy design and implementation.~~
	Research and innovation for society strategy	What strategies or plans exist, if any, to strategically direct government support for societal well-being and cohesion?
	Mission-oriented innovation policies Note: This question comes from the 2019 module. The proposal is to retain it in the core survey.	What mission-oriented policy initiatives, if any, coordinate multiple instruments and/or regulatory measures that leverage STI to address a societal challenge (e.g. climate change) in a defined timeframe?
	Green energy transitions	What policy initiatives, if any, aim to support research and innovation for clean energy and net-zero ambitions?
	Ethics of emerging technologies Note: This question comes from the 2019 module. The proposal is to retain it in the core survey.	What policy initiatives exist, if any, to address ethical challenges raised by emerging technologies (e.g. artificial intelligence, neuro-technology, gene editing)?
	Research and innovation for developing countries	What policy initiatives exist, if any, specifically dedicated to supporting research and innovation in developing and less advanced countries?
	Multi-stakeholder engagement	What policy initiatives exist to promote a broad and diversified public engagement in research and innovation activities and policy making?
	Science, technology and innovation culture	What are the main policy initiatives for raising awareness in STI activities across society at large?

1.1 Additional questions module (policy themes)

3. The 2019 survey had an additional question "module", i.e. "Emerging trends in STI policy" that included seven questions. The 2021 edition will have two modules: "Countering impacts of COVID-19 on STI systems" with five questions. Four of these questions will be prefilled with the data collected in the OECD Survey on STI policy responses to COVID-19. A separate module will have two questions focusing on the European Research Area (ERA). In particular, this module aims to capture initiatives launched in

the context of the European Commission's communication "A new ERA for Research and Innovation".[7] The questions in this module will be addressed only to countries participating in the ERA.

Table 2. Question modules for the 2021 survey

Module name	Policy Theme	Question in the 2021 EC-OECD STI Policy Survey	Prefilled from the OECD Survey on STI policy responses to COVID-19
Countering impacts of COVID-19 on STI systems	STI system orientation policy debates	What are the main policy debates, if any, on the purpose and orientation of the STI system, as a long-term response to the COVID-19 crisis?	Yes
	Governance arrangements to tackle COVID-19	What policy initiatives, if any, are in place for strategic planning, coordination and monitoring of the STI response to COVID-19?	Yes
	Stimulus for STI systems	What policy initiatives, if any, aim to sustain research and innovation activities during the COVID-19 pandemic?	Yes
	Mitigating long-term impacts of COVID-19	What policy initiatives, if any, aim to mitigate longer-term negative impacts of COVID-19 on the STI system?	Yes
	Building more resilient societies and economies	In the wake of the COVID-19 crisis, what policy initiatives, if any, have been introduced to leverage STI to make societies more sustainable, inclusive and better prepared for future crises?	No
ERA-related initiatives	ERA-related strategies	What strategies or plans exist, if any, to contribute to the strengthening of the ERA and, more generally, to improve the coordination of related policies within your country and across the EU?	No
	Strengthening R&I within the ERA	What policy initiatives, if any, have been introduced to prioritise R&D investment targets as a response to the recent European Commission Communication on "A new ERA for Research and Innovation", i.e. COM(2020) 628 final?	No

2. Policy initiative fiche (unit of reporting)

4. Besides "policy debate" questions beginning each section of the survey, questions are answered by reporting policy initiatives. To report a policy initiative, respondents have to provide a number of details. Table 3 lists the policy initiative fiche's fields and describes the type of data collected. In the 2019 edition, this fiche was composed of 16 fields, of which only seven were set as mandatory (to capture essential information). The 2021 edition has two additional non-mandatory fields "Any shifts related to COVID-19?" and "Parent initiative".

[7] See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A628%3AFIN.

Table 3. Fields in the Policy Initiative Fiche in the 2017 EC-OECD STI Policy Questionnaire

Field title	Type of field
Name in English*	(*free text*)
Name(s) in original language	(*multiple free text fields, one per name*)
Acronym	(*free text*)
Internet link(s) Note: this field was moved from further below to improve the response rate.	(*multiple free text fields, one per link*)
Start date*	(*year*)
Policy initiative is a structural reform?	*yes/no*; if yes, the next field is disabled
End date	(*year*)
Short description*	(*free text*)
Objectives*	(*multiple free text fields, one per objective*)
Background including shifts in the policy initiative	(*free text*)
Any shifts related to COVID-19?	Multiple choice selection (multiple answers possible): - Reduced funding; - Increased funding; - Prioritised COVID-related research/innovation support; - Introduced flexible eligibility criteria, application requirements and/or deadlines; - Other (please specify)
Type(s) of policy instruments*	(*multiple choice selection, see p. 12*)
Direct beneficiaries*	(*multiple choice selection, see p. 11*)
Name of responsible organisation(s)*	(*multiple free text fields, one per organisation*)
Estimated budget expenditure range per year (in EUR)* Note: As an alternatively to the multiple choice selection of budget ranges in EUR, users can indicate an amount in national currency.	Multiple choice selection (in EUR) (one answer only): - Less than 1M; - 1M-5M; - 5M-20M; - 20M-50M; - 50M-100M; - 100M-500M; - More than 500M; - Don't know; - Not applicable
Parent initiative (if applicable)	(*dropdown selection listing other initiatives in the survey*)
~~Internet link(s)~~	~~(*multiple free text fields, one per link*)~~
Evaluated	*yes/no*
Link to evaluation	(*free text*)

Note: * Indicates the field is mandatory.

3. Direct beneficiaries

5. Table 4 includes the list of beneficiaries that can be selected in the policy initiative fiche. The table classifies them in categories used in the questionnaire interface and in the STIP Compass portal. When submitting policy information, this classification allows the list to be more easily browsed when entering the data in the questionnaire interface. Likewise, in STIP Compass, this grouping also allows the data to be aggregated and summarised in visualisations. Under the current proposal, the list of beneficiaries of the 2019 edition of the survey is left unchanged in the 2021 edition.

Table 4. Direct beneficiaries (target group) taxonomy

Category	Direct beneficiaries (target group)
Research and education organisations	
	Higher education institutes
	Public research institutes
	Private research and development lab
Researchers, students and teachers	
	Established researchers
	Postdocs and other early-career researchers
	Undergraduate and master students
	Secondary education students
	PhD students
	Teachers
Firms by size	
	Firms of any size
	Micro-enterprises
	SMEs
	Large firms
	Multinational enterprises
Firms by age	
	Firms of any age
	Nascent firms (0 to less than 1 year old)
	Young firms (1 to 5 years old)
	Established firms (more than 5 years old)
Intermediaries	
	Incubators, accelerators, science parks or technoparks
	Technology transfer offices
	Industry associations
	Academic societies / academies
Governmental entities	
	International entity
	National government
	Subnational government
Economic actors (individuals)	
	Entrepreneurs
	Private investors
	Labour force in general
Social groups especially emphasised	
	Women
	Disadvantaged and excluded groups
	Civil society

4. Policy instruments

6. Table 5 lists and classifies the policy instruments that survey respondents can select as being used in policy initiatives. This table classifies instruments using a functional approach, though many other classifications are possible (e.g. by the aforementioned themes and by target group). This classification aims to be straightforward to use in the questionnaire, providing a list of innovation policy instruments that follow OECD literature and that capture the data countries have submitted in prior editions of the STIP

Survey. The 2021 edition of the survey improves the labeling and definition of two instruments: “Tax or social contributions relief for firms investing in R&D” (which was previously limited to corporate tax relief) and “Science and technology regulation”.

Table 5. Policy instruments taxonomy

Category	Instrument	Definition
Governance		
	~~National~~ Strategies, agendas and plans	Strategies that articulate the government's vision regarding the contribution of STI to ~~a country's~~ social and economic development. They set priorities for public investment in STI and identify the focus of government reforms, for instance in areas such as funding of public research and promoting business innovation.
	Creation or reform of governance structure or public body	Significant changes in the institutional arrangements concerning STI policy processes. Possible examples include mergers of STI-related ministries, reform of an innovation agency or creation of a new oversight body.
	Policy intelligence (e.g. evaluations, reviews and forecasts)	Tools for advancing policy learning that aim to improve the design and implementation of policies or that seek to fine-tune STI governance arrangements. Possible examples include policy evaluations, benchmarking studies, system reviews, technology assessments and foresight exercises.
	Formal consultation of stakeholders or experts	Programmes allowing non-government actors (e.g. the research community, business, civil society, regional and local governments) to express their views or provide expert advice that inform policy-making processes.
	Horizontal STI coordination bodies	Public body ensuring the coherence of STI policy making by setting up mechanisms to co-ordinate different levels of governments. For instance, research and innovation councils and committees may mediate between different ministries and agencies, provide policy advice, set policy priorities and/or oversee policy evaluation.
	Regulatory oversight and ethical advice bodies	Dedicated authorities or publicly funded boards that assess, monitor and/or advise on the implementation or need for formal regulations soft law or ethical frameworks accounting for technological developments. Examples include data protection authorities and bioethics committees.
	Standards and certification for technology development and adoption	Support provided for the development and adoption of local and international standards, including metrology, inspection, certification, accreditation and conformity assessments.
	Public awareness campaigns and other outreach activities	Instruments promoting the awareness of STI activities and entrepreneurial and innovation culture within non-governmental actors. Examples include science fairs in public schools and open days in universities or power plants.
Direct financial support		
	Institutional funding for public research	Non-competitive grants funding HEIs and PRIs according to various criteria (e.g. research capacity and performance indicators) to fulfil their research missions. Block funding provides these organisations with stable resources and a certain degree of autonomy in their research activities.
	Project grants for public research	A direct allocation of funding to HEIs or PRIs seeking to finance all or part of a research project. Grant schemes can vary from very simplistic, one-off funding allocations, to complex strategic programs built on formal public-private partnerships.
	Grants for business R&D and innovation	A direct allocation of funding to firms seeking to finance all or part of a project involving R&D and/or innovation activities. Grant schemes can vary from very simplistic, one-off funding allocations, to complex strategic programs built on formal public-private partnerships.
	Centres of excellence grants	Competitive grants funding the core activities of higher education and public research institutes and focusing on the promotion of high quality scientific research. Funding may be associated to a performance contract.
	Procurement programmes for R&D and innovation	The process whereby public bodies commission R&D activities or innovative goods and services from third parties. These bodies may include government agencies at different national and sub-national levels, as well as state-owned enterprises.
	Fellowships and postgraduate loans and scholarships	Initiatives providing financial support to encourage researchers to establish careers in public sector research and industry (fellowships) and for higher education students at master's level or above (loans and scholarships).
	Loans and credits for innovation in firms	Government-subsidised programmes that allow firms to raise working or investment capital by borrowing under better conditions compared to the market. Subsidised loans and credits are often geared toward specific objectives, such

	as export promotion (i.e. export credit) or the acquisition of new equipment.
Equity financing	Government-subsidised investment in which small and innovation-intensive companies sell equity (shares) to raise capital. They use this capital to fund their growth, as they often have limited capacity to generate revenue at this early stage of the entrepreneurial process.
Innovation vouchers	Vouchers are small grants allocated to SMEs to purchase services from external knowledge providers. Vouchers are often employed to fund business advisory and technology extension services, among others.
Indirect financial support	
~~Corporate t~~Tax or social contributions relief for firms investing in R&D and innovation	Incentives that reduce the tax burden of firms who invest in eligible R&D and innovation activities, representing an indirect way of financial support. Examples include corporate tax income benefits, reductions in tariffs for imported research equipment ~~and~~, reimbursements of value added tax and reductions to social insurance contributions.
Tax relief for individuals supporting R&D and innovation	Incentives that reduce the tax burden of individuals who donate monies to public research activities (e.g. conducted by universities) or who directly invest in R&D and innovation activities (e.g. R&D intensive start-up).
Debt guarantees and risk sharing schemes	Schemes working to cover some portion of the losses experienced by lenders when firms default on loans. These are widely-used as financial instruments for supporting SME growth.
Collaborative infrastructures (soft and physical)	
Networking and collaborative platforms	Instruments aiming to gather together actors within the innovation system. For instance, entrepreneurs, investors and companies sharing common geographical locations. Another example includes science-industry platforms seeking to support the commercialisation of knowledge.
Dedicated support to research infrastructures	Instruments that support the creation of new facilities, resources and services used by the science community to conduct research and foster innovation. They include: major scientific equipment, e-infrastructures such as data and computing systems and communication networks.
Information services and access to datasets	Online platforms providing access to collections of data on research and innovation activities. This includes resources such as archives or scientific data and directories of actors in a given innovation ecosystem.
Guidance, regulation and incentives	
Technology extension and business advisory services	Instruments that support innovation and entrepreneurship activities by stimulating improvements in businesses. These may cover aspects such as operations, production, quality, logistics, workforce skills, learning capabilities and the adoption of new technologies and often have the objective of increasing firm productivity and efficiency.
~~Emerging~~ Science and technology regulation	Laws, rules, guidelines, directives or other policies made by a public authority on the development or use of new technologies (e.g. artificial intelligence, neuro-technology and gene-editing) or practices in science. Examples include the General Data Protection Regulation (GDPR) and bioethics legislation and scientific codes of conduct.
Labour mobility regulation and incentives	Instruments that promote the recruitment across sectors and/or countries of highly qualified individuals including scientists and engineers. Sample initiatives include funding for international research projects, talent attraction programmes and coherent and efficient migration regimes.
Intellectual property regulation and incentives	Instruments regulating and promoting the adoption of intellectual property rights and practices. This includes the registration and commercialisation of intangible assets that are the result of human innovation and creativity.
Science and innovation challenges, prizes and awards	A monetary (or other) incentive offered to STI actors in recognition of their contributions to research and innovation. Inducement prizes reward a solution to a research/innovation challenge. Recognition awards are ex-post prizes given to highly innovative companies and researchers in order to foster their role in the ecosystem or to signal specific projects/ventures.

7. The tables below introduce facets (descriptive characteristics) for each of the policy instruments presented above. Note that a highlighted facet indicates that multiple selections are possible.

GOVERNANCE

1. ~~National S~~trategies, agendas and plans

Facet	Facet choices
Focuses on the following area(s) of the national innovation system	
	Research
	Business (innovation and/or entrepreneurship)
	Education and skills
	Governance
	Other
Foresight exercise included	
	Yes
	No
Strategy mainly prioritises	
Note: ~~for each selection that is made~~ when the option "R&D intensity" is selected, we would like there to be two additional non-mandatory fields: i) Quantifiable target (if set by the strategy): (short open text field) ii) Deadline for achieving target: (year selection) Note: The 2019 edition of the survey experimented in gathering the above details on targets. Only in a few instances were these reported and, in most cases, targets were left unreported. For this reason, 2021 survey will only aim to collect targets on R&D intensity.	STI policy governance (e.g. vertical and horizontal coordination, evaluation)
	R&D intensity (e.g. GERD as a % of GDP)
	Clusters and regional support (including regional/local R&D investments)
	Specific areas/sectors (e.g. new industrial policy, R&D targets for clean tech)
	Business innovation and innovative entrepreneurship
	Access to finance for innovation (e.g. venture capital, business angels, financial markets)
	Public research capabilities
	Digitalisation
	Skills for research and innovation
	Technology transfers and commercialisation
	Societal challenges (e.g. social inclusiveness)
	Environmental challenges (e.g. sustainability)
	International cooperation on STI
	Stakeholder participation and consultation
	Other
Specific ~~business~~ sector(s) targeted	
	None specifically targeted
	Agriculture
	Mining and quarrying
	Food
	Energy
	Electronics
	Pharmaceuticals
	Automotive and road transportation
	Marine / Ocean
	Aerospace
	Education
	Health and healthcare
	Telecommunications and IT

	Finance
	Defence
	Public administration
	Other primary industries
	Other manufacturing
	Other services
Societal challenge(s) emphasised	
	None specifically emphasised
	Health
	Ageing populations
	Inclusiveness (e.g. inequality, job insecurity)
	Food security
	Energy security
	Climate change
	Environmental sustainability
	Other
Degree of coordination in implementing strategy (select the highest that applies)	
	1- Strategy communicated to public bodies
	2- Public bodies are expected to plan activities based on strategy
	3- Strategy provides recommendations to public bodies which they have to adopt or reject via formal procedures
	4- Strategy dictates public bodies' activities or budgets
Follow-up mechanism	
	Action plan
	Dedicated budget allocations
	Linked to new law or regulation
	Periodic monitoring and/or evaluation of progress
	Dedicated coordinating/monitoring public body
	None
	Other

2. Creation or reform of governance structure or public body

Facet	**Facet choices**
Description of changes in institutional arrangements	
	(free long text)

3. Policy intelligence (e.g. evaluations, benchmarking and forecasts)

Facet	Facet choices
Type of information	
	Evaluations
	Forecasting and foresight studies
	Reviews
	Technology assessments
	Roadmaps
	Scoreboards, indicators and benchmarking
	Other
Provides input to	
	Problem definition
	Policy objective formulation
	Policy design
	Policy implementation
	Policy assessment
	Other
Study performed by	
	Public administration
	Public research institute
	Academia
	Private firms or consultants
	Civil society organisation
	Intergovernmental organisation
	Other

4. Formal consultation of stakeholders or experts

Facet	Facet choices
Stakeholders contribute to	
	Problem definition
	Policy objective formulation
	Policy design
	Policy implementation
	Policy assessment
	Other

Method	
	~~Online survey~~
	~~Offline S~~survey Note: this option will be merged with the one above.
	Conferences and public hearings
	Participatory workshops and seminars
	Focus groups
	Interviews
	Expert groups
	Online discussion fora
	Other
Number of participants	
	Less than 25
	25 to 100
	101 to 250
	More than 250

5. Horizontal STI coordination bodies

Facet	**Facet choices**
Type of coordinating public body	
	Ministry
	Coordination or advisory council / committee
	Agency (e.g. research council, innovation agency)
	Ad-hoc working group or network of representatives
	Other
Reports to	
	International organisation (e.g. European Commission, UNESCO)
	Head of national government
	Ministry
	Legislative branch (e.g. parliament)
	Agency / council
	Other
As mechanisms, the coordination body	
	Provides opportunities for ministries and/or public bodies to meet
	Provides opportunities to involve non-state stakeholders
	Undertakes studies scoped jointly by ministries
	Identifies and arbitrates policy divergences
	Issues specific recommendations to ministries
	Implements joint programming
	Decides budget allocations
Sectors of public administration involved	
	Science, technology and innovation
	Economic affairs
	Education

	Finance
	Transport and infrastructure
	Environment
	Energy
	Culture
	Defence
	Foreign affairs
	Labour
	Agriculture
	Justice
	Social affairs
	Health
	Other
The coordination body is composed of	
	Government representatives
	Academia representatives
	Business representatives
	Civil society representatives
	A technical secretariat (e.g. STI policy analysts)
Discussions or reports are publicly available	
	Yes
	No

6. Regulatory oversight and ethical advice bodies

Facet	**Facet choices**
Type(s) of oversight or advice	
	Fundamental rights
	Ethical principles (e.g. integrity, accountability, impartiality)
	Guidelines
	Regulations
	Other
Challenge(s) addressed	
	Risks to human safety
	Environmental sustainability
	Privacy protection
	Social disruption (e.g. job insecurity)
	Unethical use (e.g. dual-use technologies)
	Security ~~(e.g. discrimination)~~
	Fairness (e.g. discrimination)
	Limited competition (e.g. monopolies, oligopolies)
	Research misconduct
	Other

Activities	
	Monitor compliance
	Provide formal input to policymakers
	Provide guidance, advice and support to stakeholders
	Gather opinions from stakeholders on ethical principles, regulation improvements, etc.
	Provide expert ethical opinion
	Engage in long-term technology assessment
	Identify areas of oversight reform
	Cross-government coordination in developing/adopting guidelines, regulations, etc.
	Setting and adopting international standards
	Other
Reports to	
	International organisation (e.g. European Commission, UNESCO)
	Head of national government
	Ministry
	Legislative branch (e.g. parliament)
	Agency / council
	None ~~(independent body)~~
	Other
The coordination body is composed of	
	Mostly government representatives
	Mostly academia representatives
	Mostly business representatives
	Mostly civil society representatives
	A technical secretariat (e.g. policy analysts)
	A mix / other (please describe)
Reports are publicly available	
	Yes
	No

7. Standards and certification for technology development and adoption

Facet	**Facet choices**
Geographical dimension	
	National
	International
Objective(s)	
	Compatibility and interoperability
	Variety reduction
	Quality and performance
	Other

Standards developed through	
	Dedicated national public body/bodies
	Multi-stakeholder platforms and fora
	Financial support to public research and commercialisation
	Other
Adoption fostered by	
	Legislation (e.g. product market regulation)
	Guidelines
	Eligibility criteria for public funding (e.g. grants, tax relief and procurement)
	Business advisory services (e.g. consulting and training)
	Collaborative platforms
	Information services and databases
	Public outreach activities (e.g. awareness campaigns)
	Other
The following services associated to the standards have public support	
	Measurement
	Certification
	Training
	None of the above
	Other

8. Public awareness campaigns and other outreach activities

Facet	Facet choices
Medium	
	Public events
	School campaigns
	Conferences, workshops and/or training courses
	Museums
	Television
	Radio
	Competitions
	Printed publications
	Websites
	Social media
	Science fairs
	Open days (e.g. visits to universities or energy plants)
	Other

Aspect(s) being promoted	
	Science
	Entrepreneurship
	Technology
	Innovation
	Research careers
	Skills for STEM
	Gender equality
	Other

DIRECT FINANCIAL SUPPORT

9. Institutional funding for public research

Facet	Facet choices
Funding includes a teaching component	
	Yes
	No
Performance-based element to the allocation	
	Yes
	No
Criteria for funding	
	Research publications and outputs (excellence)
	Research impact
	Student enrolment or attainment rates
	Total staff
	Research-active staff
	Number of co-publications
	R&D expenditure
	Research infrastructure
	Commercialisation of research-generated intellectual property
	Employability of graduates
	Scientific partnerships and collaborations
	Social inclusion (e.g. women and other under-represented groups) of student and research staff
	Alignment with national research priorities
	Budget allocated to institution in previous years
	Other
Funding is attached to	
	Institutional performance contract
	National performance-based research assessment
	Strategic programme or other policy initiative
	None of the above
Penalties and rewards associated to performance	
	Financial penalties
	Bonuses and incentives
	None of the above

Funding amount allocated for an average time-period of	
	3 years or less
	4-6 years
	7 years or more

10. Project grants for public research

Facet	Facet choices
Maximum grant duration	
	12 months or less
	13-24 months
	25-36 months
	More than 36 months
Maximum amount of grant awarded in euros	
	Less than 100K
	100K-500K
	500K-1M
	More than 1M
Type of activity	
	Basic research
	Applied research
	Multidisciplinary research
	Experimental development
	Demonstration / testing
Requires a form of collaboration	
	No
	With other public research actors
	With industry partners
	With international partners
	With users of research outputs (e.g. technology, innovation)
	With other partners
Selection criteria	
	Track record of applicant
	Scientific impact anticipated
	Societal impact anticipated
	Commercial impact anticipated
	Third-party income and co-funding (e.g. contract research, other grants)
	The participation of early-career researchers
	Geographical location (to promote regional or cluster policy)
	Social inclusion in research (e.g. women and other under-represented groups)
	Alignment with national research priorities
	Other

Type(s) of proposal screening	
	Internal: review by grant manager (i.e. funding agency)
	External peer review: including members of the scientific community
	External peer review: including business society representatives
	External peer review: including research users and stakeholders
	Experimental methods (e.g. lotteries, sandboxes)
Success rate (share of grants awarded as a % of total applications)	
	Too early to estimate
	Less than 10%
	10-19%
	20-29%
	30-39%%
	40% or higher

11. Grants for business R&D and innovation

Facet	**Facet choices**
Maximum grant duration	
	12 months or less
	13-24 months
	25-36 months
	More than 36 months
Maximum amount of grant awarded in euros	
	Less than 100K
	100K-500K
	500K-1M
	More than 1M
Type of activity	
	Basic research
	Applied research
	Experimental development
	Non-technological innovation
	Demonstration / testing
Requires a form of collaboration	
	No
	With higher education institutes or public research institutes
	With industry partners
	With SMEs
	With international partners
	With intermediaries (e.g. accelerators)
	With users of R&D or innovation outputs
	With other partners

Selection criteria	
	Track record of applicant
	Feasibility of project
	Anticipated return on investment
	Societal impact anticipated
	Geographical location (to promote regional or cluster policy)
	Social inclusion (e.g. women and other under-represented groups)
	Alignment with national strategic priorities (e.g. targeted business sectors and technologies)
	Other
Contribution (e.g. matching funds) required from beneficiary	
	Yes
	No

12. Centres of excellence grants

Facet	Facet choices
Maximum duration of funding for individual unit/centre	
	5 years or less
	6-10 years
	More than 10 years
	Indefinite
Share of public funding (as a % of total funding of the centre of excellence)	
	100%
	90-99%
	70-89%
	50-69%
	Less than 50%
Focus	
	Field of science
	Key technology (basic research)
	Key technology (commercial applications)
	Promoting early-stage researchers
	Enhanced access to research results and research data
	Networking/co-operation (e.g. science-industry)
	Recruiting foreign researchers and other international linkages
	Societal challenge(s)
	Sharing equipment and infrastructures
	Demonstration and testing facilities
Criteria for funding	
	Alignment to national research priorities
	Result of a national performance-based assessment
	Novelty of research or its application
	Existing research capacity
	Track record

	Scientific impact anticipated
	Commercial impact anticipated
	Societal impact anticipated
	Ability for the centre to acquire additional funds
	~~Structural inclusion of beneficiaries in host institutes~~ Note: this option has only been selected by a couple of initiatives.
Requires a form of collaborative research	
	No
	Science-science
	Science-industry
	Industry-industry
	Other
Ownership of Intellectual Property (IP) stemming from science-industry research	
	No IP registered
	Some IP owned exclusively by the public sector
	Some IP owned exclusively by the private sector
	Some IP co-owned between public and private actors
	Not applicable
Penalties and rewards associated to performance	
	Financial penalties
	Bonuses and incentives
	None of the above

13. Procurement programmes for R&D and innovation

Facet	Facet choices
Type of programme	
	Reform of regulatory conditions for innovation procurement
	Improving the capacity and competence of the innovation procurement process
	Dedicated innovation procurement fund
	Dedicated R&D procurement fund
	Other
R&D/innovation objective(s)	
	None specified
	Create demand for technology or innovative products and services
	Promote specific research priorities
	Help innovators bridge the pre-commercialisation gap
	Facilitate access to private third-party funding by providing preliminary financial support
	Tackle societal or environmental challenges
	Support innovative SMEs, researchers or other programme beneficiaries
	Other

Programme focus	
	No specific focus
	Public sector innovation
	Promote science-industry cooperation
	Support innovative SMEs
	Green growth
	Strategic business sector
	Strategic technology
	Societal challenges
	Other

14. Fellowships and postgraduate loans and scholarships

Facet	Facet choices
Type of financial assistance	
	Repayable
	Non-repayable
Type of individual sponsored	
	Master student
	Doctoral student
	Post-doctoral researcher
	Established researcher
Promotes international mobility of students and researchers	
	Outgoing
	Incoming
	Both outgoing and incoming
	No
Promotes intersectoral mobility (e.g. between the academic and private sectors)	
	From academia to the private sector
	From the private sector to academia
	No

15. Loans and credits for innovation in firms

Facet	Facet choices
Average term	
	1-3 years
	4-6 years
	7-9 years
	10 years or more
Type(s) of finance targeted	
	Working capital
	Financing expansion
	Investing in innovation

	Other
Specific loan/credit objective(s)	
	None specified
	Developing new products and processes
	Upgrading an existing product or process
	Acquiring a technology
	Other
Mechanisms used	
	Loan with a subsidised interest rate
	Loan to be reimbursed in case of success
	Equity-backed loan
	Other

16. Equity financing

Facet	Facet choices
Type of financing	
	Venture capital (growth and late stage)
	Seed capital (early stage)
	Other
~~Mechanism(s)~~	
Note on why this being deleted: The results we have gathered here are not really discriminatory: Fund (100 initiatives), Tax incentives (3), Regulatory framework (5) and Other (10).	~~Fund~~
	~~Tax incentives~~
	~~Regulatory framework~~
	~~Other~~
Type of fund	
	None
	Direct public equity fund
	Fund-of-funds
	Co-investment fund
	Other
Focus	
	None
	Support innovative start-ups and SMEs
	Attract international entrepreneurs
	Support access to international markets
	Foster public research spin-offs
	Social entrepreneurship
	Other

17. Innovation vouchers

Facet	Facet choices
Minimum voucher amount	
	Less than 2K EUR
	2K-6K EUR
	6K-10K EUR
	More than 10K EUR
	Varies depending on conditions
Maximum voucher amount	
	Less than 2K EUR
	2K-6K EUR
	6K-10K EUR
	More than 10K EUR
	Varies depending on conditions
Eligibility criteria	
	Firm is registered in the country
	Firm size
	Firm has not received more than a certain amount of public aid over a defined period of time
	Firm has not entered in any commitments with the knowledge provider that will carry out the project
	Knowledge provider is certified
	~~Exporting firm~~ Note: this option has not been used.
Type of knowledge provider	
	Higher education institutes
	Public research institutes
	Private business
	Other
Brokerage services are provided	
	Yes
	No
Contribution (e.g. matching funds) required from recipient	
	Yes
	No
Possible to pool vouchers from several firms	
	Yes
	No

INDIRECT FINANCIAL SUPPORT

18. ~~Corporate t~~Tax or social contributions relief for firms investing in R&D and innovation

Facet	Facet choices
Applicable provisions (i.e. eligible expenses)	
	Expenditures on R&D
	Expenditures on other innovation activities
	Expenditures on training and upskilling of employees
	Incomes from IP licensing or asset disposal

8. Note: The OECD Working Party of National Experts on Science and Technology Indicators (NESTI) already provides detailed information on tax relief instruments. The Secretariat plans to integrate this data into STIP Compass and display it where appropriate.

19. Tax relief for individuals supporting R&D and innovation

Facet	Facet choices
Applicable provisions (i.e. eligible expenses)	
	Donations to public research activities
	Investments in start-ups and SMEs
	Other

20. Debt guarantees and risk sharing schemes

Facet	Facet choices
Scheme managed by	
	Government
	Private sector
	Other
Type(s) of finance targeted	
	Working capital
	Financing expansion
	Investing in innovation
	Other
Specific loan/credit objective(s)	
	None specified
	Developing new products and processes
	Upgrading an existing product or process
	Acquiring a technology
	Other
Claims rate (latest estimate)	
	Too early to estimate
	less than 1%
	1-2%
	3-5%
	More than 5%

COLLABORATIVE INFRASTRUCTURES (SOFT AND PHYSICAL)

21. Networking and collaborative platforms

Facet	Facet choices
Focus	
	Business innovation-oriented
	Technology-oriented
	Geographic clustering
	Research-oriented
	Education-oriented
	Building international linkages
	Addressing societal or environmental challenges
	Other
Share of the platform's funding coming from the private sector (as a % of total funding)	
	More than 75%
	51-75%
	26-50%
	1-25%
	0%
Exchanges take place via	
	Online platform
	Meetings and events
	Sharing infrastructures or facilities
	Mobility of personnel, researchers or students
	Other
Objective(s)	
	Promote economic growth (e.g. productivity, competitiveness)
	Promote business partnerships (e.g. consortia-building)
	Promote research partnerships
	Define research priorities
	Coordinate R&D developments
	Share R&D data
	Coordinate on intellectual property practices (e.g. co-patenting and licensing)
	Set standards
	Demonstrate technological developments and innovations
	Foster fundraising and investor networking
	Other
Ownership of IP stemming from science-industry research	
	No IP registered
	Some IP owned exclusively by the public sector
	Some IP owned exclusively by the private sector
	Some IP co-owned between public and private actors
	Not applicable

22. Dedicated support to research infrastructures

Facet	Facet choices
Main focus of support	
	National infrastructure(s)
	International infrastructure(s)
Objective(s)	
	Address national research priorities
	Support the internationalisation of public research
	Promote partnerships among HEIs/PRIs
	Foster science-industry collaboration
	Address societal or environmental challenges
	Promote regional or cluster policy
	Other
Funding used for	
	Acquiring major scientific equipment
	Building new facilities
	Renewing or modernising existing facilities
	Increasing user access to infrastructure
	Gaining access to existing international infrastructures
	Hiring research and technical staff
	Training research and technical staff
	Building knowledge repositories of scientific data and archives
	Building computing systems and virtual infrastructures
	Other

23. Information services and access to datasets

Facet	Facet choices
Openness	
	Publicly available
	Restricted access
Type of data disseminated	
	Data collected through the provision of public services (administrative data) (e.g. medical data of patients)
	Job postings
	Information on STI actors (e.g. researcher resumes, profiles of firms, research groups and institutes)
	Academic articles and other types of scientific production
	Intellectual property registries (e.g. patent databases)
	Research results and raw research data
	Information on grants, scholarships and other types of government support
	Directory of firms, investors, R&D institutes and other types of STI actors
	Guidelines
	Crowdfunding initiatives
	Other

GUIDANCE, REGULATION AND OTHER INCENTIVES

24. Technology extension and business advisory services

Services provided by	
	Higher education institutes
	Public research institutes
	Public body from national government
	Public body from regional or local government
	Private consultants and business experts
	Intermediaries (e.g. technology transfer offices, incubators)
	Other
Modality	
	Consultancy
	Training
	Networking with investors, clients, suppliers, etc.
	Other
Type of advisory service	
	Intellectual property protection (e.g. filing and litigation)
	Intellectual property commercialisation (e.g. licensing and royalty agreements)
	Support the adoption of existing technologies
	Implement technology best practices or support meeting national or international standards
	Quality management and process efficiency
	Environmental impacts and energy use
	Human resource development
	Product development
	Support to drafting applications for grants and other policy instruments
	Support to business plan preparations
	Marketing (including market research)
	Fundraising
	Export promotion
	Other

25. ~~Emerging~~ Science and technology regulation

Facet	Facet choices
~~Role of government~~Objective	
	Market regulation~~or~~ (e.g. antitrust law)
	Enable ~~T~~technology/innovation ~~enabler~~ (e.g. interoperability standards)
	Risk mitigation (e.g. consumer and social protection)
	Regulate the ~~D~~delivery~~ery~~ of public services (e.g. requirements in procurement, education)
	Promote research integrity
	Protect~~or~~ ~~of~~ public values

Challenge(s) addressed	
	Risks to human safety
	Environmental sustainability
	Privacy protection
	Social disruption (e.g. job insecurity)
	Unethical ~~use~~ practices (e.g. discrimination)
	Security (e.g. dual-use technologies)
	Limited competition (e.g. monopolies, oligopolies)
	Other
Type(s) of regulation	
	Formal law or regulation
	International agreement
	Self-regulation (e.g. codes of conduct, scientific advice, standards)
	Regulatory experiments (e.g. sandboxes)
	Other
Regulatory approach	
	Technology or input-based regulation (e.g. moratoria, standards of use)
	Performance or output-based regulation (e.g. safety thresholds)
Level of governance	
	Local
	Regional
	National
	International
Approach to monitor compliance	
	The regulator develops and maintains technologies for data collection, transmission and/or analytics
	Regulated parties are incentivised to adopt monitoring technology that is not managed by the regulator
	Regulated parties are simply required to share compliance data (no regulator support)

26. Labour mobility regulation and incentives

Facet	**Facet choices**
Type of mobility	
	Intersectoral (public to private sector or vice-versa)
	International
	Within country
Programme objective(s)	
	Promote international knowledge flows
	Attract back diaspora (e.g. emigrating talent)
	Attract foreign talent
	Build industry-science linkages
	Promote research excellence
	Improve performance of host institutes/firms
	Other

Mechanism	
	Regulatory (e.g. immigration legislation and quotas)
	Guidelines
	Service or information (e.g. web portal)
	Economic (e.g. salary subsidy)
	Networking (e.g. coordinating staff exchange)
	Other
Portion of salary subsidised by the instrument	
	No
	Less than 40%
	40-80%
	More than 80%
Average duration of salary subsidy	
	Not applicable
	No subsidy
	less than 6 months
	6-18 months
	More than 18 months
Screening scheme	
	Not applicable
	Employer-led
	Government-led (e.g. points based)
	Hybrid (government and employer)
Intended mobility destination	
	None specified
	Higher education institutes
	Public research institutes
	Private research and development labs
	Firms
	Other

27. Intellectual property regulation and incentives

Facet	Facet choices
Mechanism(s)	
	Legislation
	Streamlined administrative procedures
	Intellectual property regime reform (e.g. patent law)
	Subsidies for intellectual property operations (e.g. filing and renewal costs)
	Supporting IPR clinic services (e.g. consultancies and guidance)
	Training
	Data dissemination (e.g. patent registries)
	Awareness campaigns
	Other

Area(s) of the intellectual property system promoted	
	Registration and ownership
	Commercialisation (e.g. licensing)
	Enforcement
	Litigation
	Internationalisation
Type(s) of intellectual property promoted	
	Patents
	Copyrights
	Trademarks
	Industrial designs
	Utility models
	Geographical indications
	Open source
	Other

28. Science and innovation challenges, prizes and awards

Facet	Facet choices
Selection type	
	Ex-ante (based on a solution to a proposed challenge)
	Ex-post (based on a scientific achievement or developed innovation)
Type of challenge	
	Health
	Ageing population
	Social inclusion
	Food security
	Energy security
	Climate change
	Environmental sustainability
	Research challenge, i.e. centred on a specific domain of science or technology
	Business challenge, i.e. centred on a specific market need
	Other
Type of reward	
	Monetary
	Honorific (e.g. label, recognition)
	Exposure to a network of investors
	Provision of business innovation and technology advice
	Other