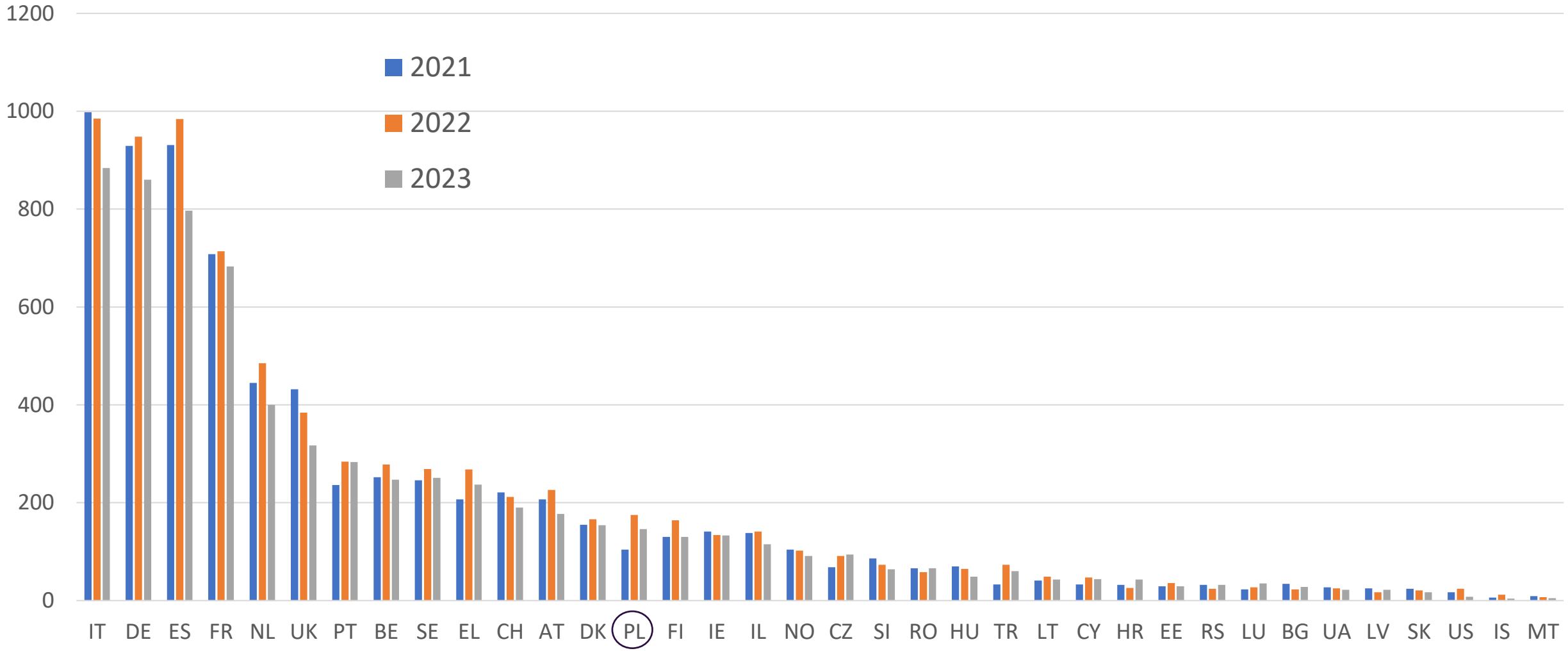
EIC Pathfinder

Overview and application process
Novelties and calls in 2025

ES
Grzegorz Ambroziewicz
Deputy HoU EIC Pathfinder

Applicants to Pathfinder calls 2021-2023

European Innovation Council

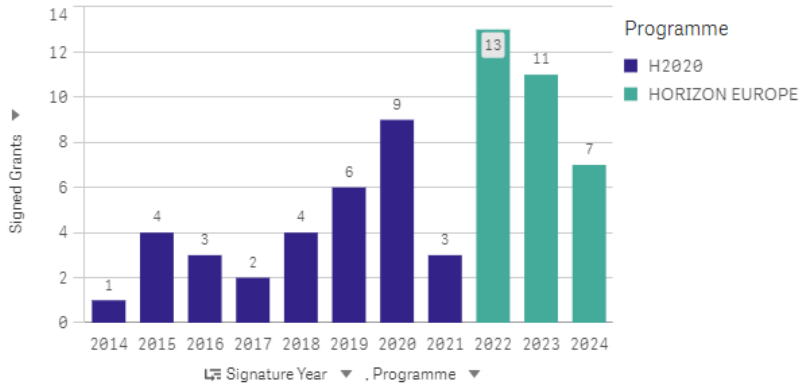


PL Beneficiaries in FET and Pathfinder

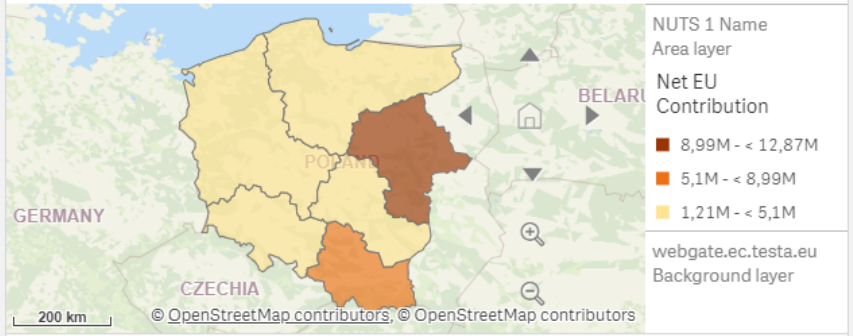
European Innovation Council

Net EU Contribution	Total Cost	Signed Grants	Participation	Unique Participants
29,27M 0,03% of Programme (All)	30,51M 0,02% of Programme (All)	63 0,12% of Programme (All)	74 0,02% of Programme (All)	50 0,08% of Programme (All)

Evolution over time



Net EU Contribution by Country / Region



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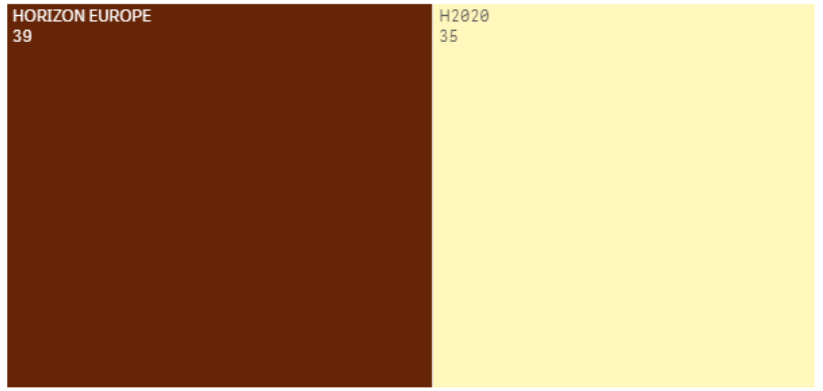
Overview by programme/pillar/thematic priority/keyword



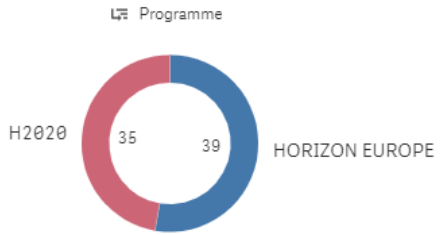
Top participating countries - regions

Programme	Table Dimension 32	Country Group
Totals		
HORIZON EUROPE	MAKROREGION WOJEWÓDZTWO MAZOWIECKIE	Member States
H2020	MAKROREGION WOJEWÓDZTWO MAZOWIECKIE	Member States
HORIZON EUROPE	MAKROREGION POŁUDNIOWY	Member States
H2020	MAKROREGION PÓŁNOCNY	Member States

Top participants

Legal Name	Country	NUTS 2 Name	Net E
Totals			**€**
UNIWERSYTET WARSZAWSKI	PL - Poland	Warszawski stołeczny	
AKADEMIA GORNICZO-HUTNICZA IM. STANISLAWA STASZICA W KRAKOWIE	PL - Poland	Małopolskie	
POLITECHNIKA WARSZAWSKA	PL - Poland	Warszawski stołeczny	
PROCHIMIA SURFACES SP. Z O.O.	PL - Poland	Pomorskie	

Overview by type of action

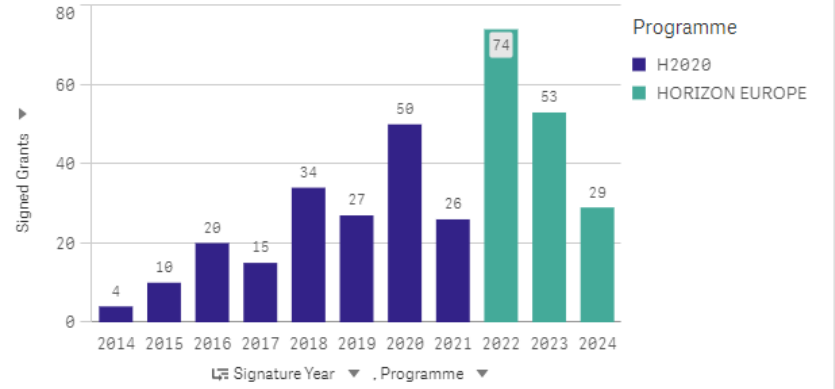


ES Beneficiaries in FET and Pathfinder

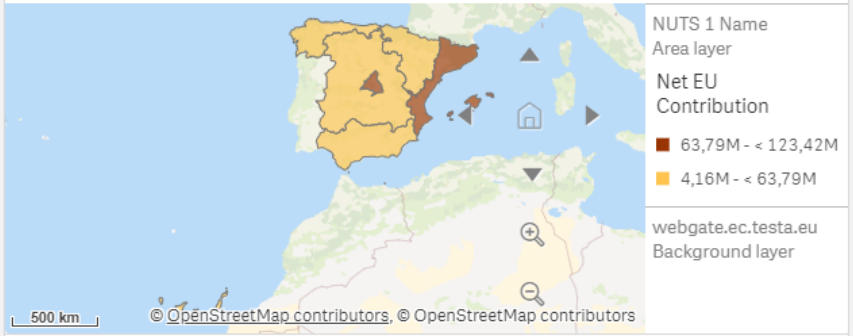
European Innovation Council

Net EU Contribution	Total Cost	Signed Grants	Participation	Unique Participants
294M 0,26% of Programme (All)	296,3M 0,21% of Programme (All)	342 0,65% of Programme (All)	616 0,20% of Programme (All)	234 0,38% of Programme (All)

Evolution over time



Net EU Contribution by Country / Region



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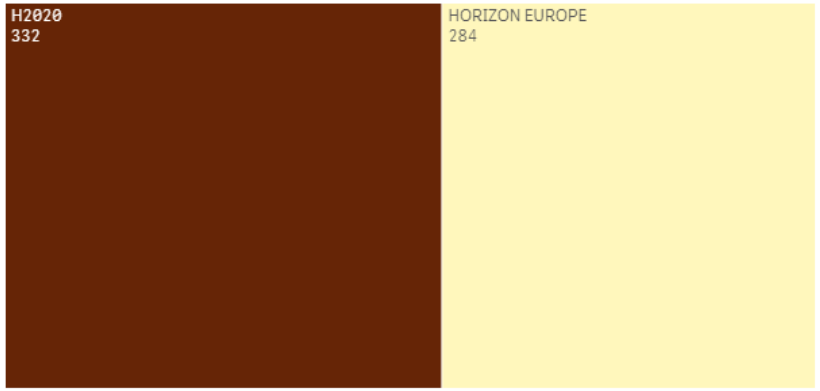
Overview by programme/pillar/thematic priority/keyword



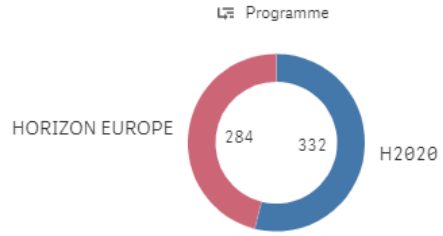
Top participating countries - regions

Programme	Table Dimension 32	Country Group
Totals		
H2020	ESTE	Member States
HORIZON EUROPE	ESTE	Member States
H2020	COMUNIDAD DE MADRID	Member States
HORIZON EUROPE	COMUNIDAD DE MADRID	Member States
H2020	NORESTE	Member States
HORIZON	NORESTE	Member States

Top participants

Legal Name	Country	NUTS 2 Name	Net
Totals			€ 2
AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES - Spain	Comunidad de Madrid	
UNIVERSITAT DE BARCELONA	ES - Spain	Cataluña	
FUNDACIO INSTITUT DE CIENCIES FOTONIQUES	ES - Spain	Cataluña	
UNIVERSITAT POLITECNICA DE VALENCIA	ES - Spain	Comunidad Valenciana	
FUNDACIO INSTITUT DE	ES - Spain	Cataluña	

Overview by type of action



Open the Exploration Menu to select an alternative dimension

CONTENTS

European Innovation Council

1 What is the EIC Pathfinder?

2 Statistics from 2021-2024 Pathfinder calls

3 2025 EIC Pathfinder Open call & its main novelties

4 2025 EIC Pathfinder Challenges call & its main novelties

5 Main changes and call summary table

1 What is the EIC Pathfinder?

What is the EIC Pathfinder?

European Innovation Council

- funds **research** to develop the **scientific basis** to underpin breakthrough technologies
- supports the **earliest stages** of scientific, technological or deep-tech R&D
- aims to build on new, **cutting-edge directions in science & technology** to disrupt a field and a market or create new opportunities
- realises innovative technological solutions to identify, develop and scale up **breakthrough technologies** and **disruptive innovations** in Europe

Funding schemes

European Innovation Council

EIC Pathfinder Open	to support projects in any field of science, technology or application without predefined thematic priorities (‘bottom-up’)
EIC Pathfinder Challenges	to support coherent portfolios of projects within predefined thematic areas with the aim to achieve specific objectives for each Challenge

3 2025 EIC Pathfinder Open call & its main novelties

Why apply?

European Innovation Council

- Realise **an ambitious vision for radically new technology**, with potential to create new markets and/or to address global challenges.
- Support for **early-stage development of such future technologies** (e.g., various activities at low **Technology Readiness Levels from 1 to 4**), based on high-risk/high-gain science-towards-technology breakthrough research (including 'deep-tech').
- This research must provide the **foundations of the technology** you are envisioning.

EIC Pathfinder Open: Gatekeepers

European Innovation Council

Collaborative, **interdisciplinary research**, meeting the following criteria:

- **convincing, long-term vision of a radically new technology** that has the potential to have a transformative positive effect to our economy and society;
- **concrete, novel and ambitious science-towards-technology breakthrough**, providing advancement towards the envisioned technology;
- **high-risk & high-gain research approach & methodology**, with concrete and plausible objectives.

Expected output | Open projects

European Innovation Council

- **Proof of principle** that the **main ideas of the envisioned future technology are feasible**, thus validating its scientific and technological basis
- Project results should include **top-level scientific publications** in open access
- Projects are expected to take the necessary measures to **allow future uptake to take place**, for instance through an **adequate formal protection of the generated Intellectual Property (IP)** and **an assessment of relevant aspects related to regulation, certification, and standardization.**
- Projects are encouraged to involve and empower in their teams **key actors** that have the potential to **become future leaders** in their field such as excellent early-career researchers or promising high-tech SMEs, including start-ups
- Project are also encouraged to **empower female researchers** and to achieve gender balance among the work package leaders

Consortium composition | Open projects

European Innovation Council

- Proposals must be **submitted by the coordinator,** on behalf of a consortium including as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows:
  - at least one legal entity established in a Member State; and
  - at least two other independent legal entities, each established in different Member States or Associated Countries.
- The legal entities may for example be universities, research organisations, SMEs, start-ups, industrial partners or natural persons.

Support Upon Proposal Funding

European Innovation Council

- You will receive a grant for a **Research and Innovation Action** to cover the **eligible costs**, necessary for the implementation of your project.
- For this call, the EIC considers proposals with a requested EU contribution of **up to EUR 3 million** as appropriate. Nonetheless, this does not preclude you to request larger amounts, if properly justified.
- The funding rate of this grant will be 100% of the eligible costs.
- The total indicative budget for this call is EUR **142 million**.
- Successful applicants will receive tailor-made access to a wide range of **Business Acceleration Services** and interactions with **EIC Programme Managers**

Additional Opportunities for Pathfinder Selected Projects:

European Innovation Council

Projects funded through EIC Pathfinder are eligible to:

- receive **EIC Booster grants** (up to 3 per project or more if duly justified) of a fixed amount not exceeding EUR 50 000 to undertake complementary activities:
  - to explore potential pathways to commercialization
  - for portfolio activities
- submit an **EIC Transition** proposal
- submit an **EIC Accelerator** proposal via the **Fast Track** scheme
- participate in '**Next Generation Innovation Talents**' scheme (personnel costs of participating researchers are eligible under Pathfinder grants)

How long does it take?

European Innovation Council

- You must submit your application via the **Funding and Tender Opportunities Portal** before the given deadline.
- You will be informed about the outcome of the evaluation within **5 months from the call deadline** (indicative).
- If your proposal is selected for funding, you can expect your **grant agreement to be signed by 8 months after the call deadline**.
- The deadline to submit the proposal is **21 May 2025 at 17.00 CEST**.

Proposal Application Form

European Innovation Council

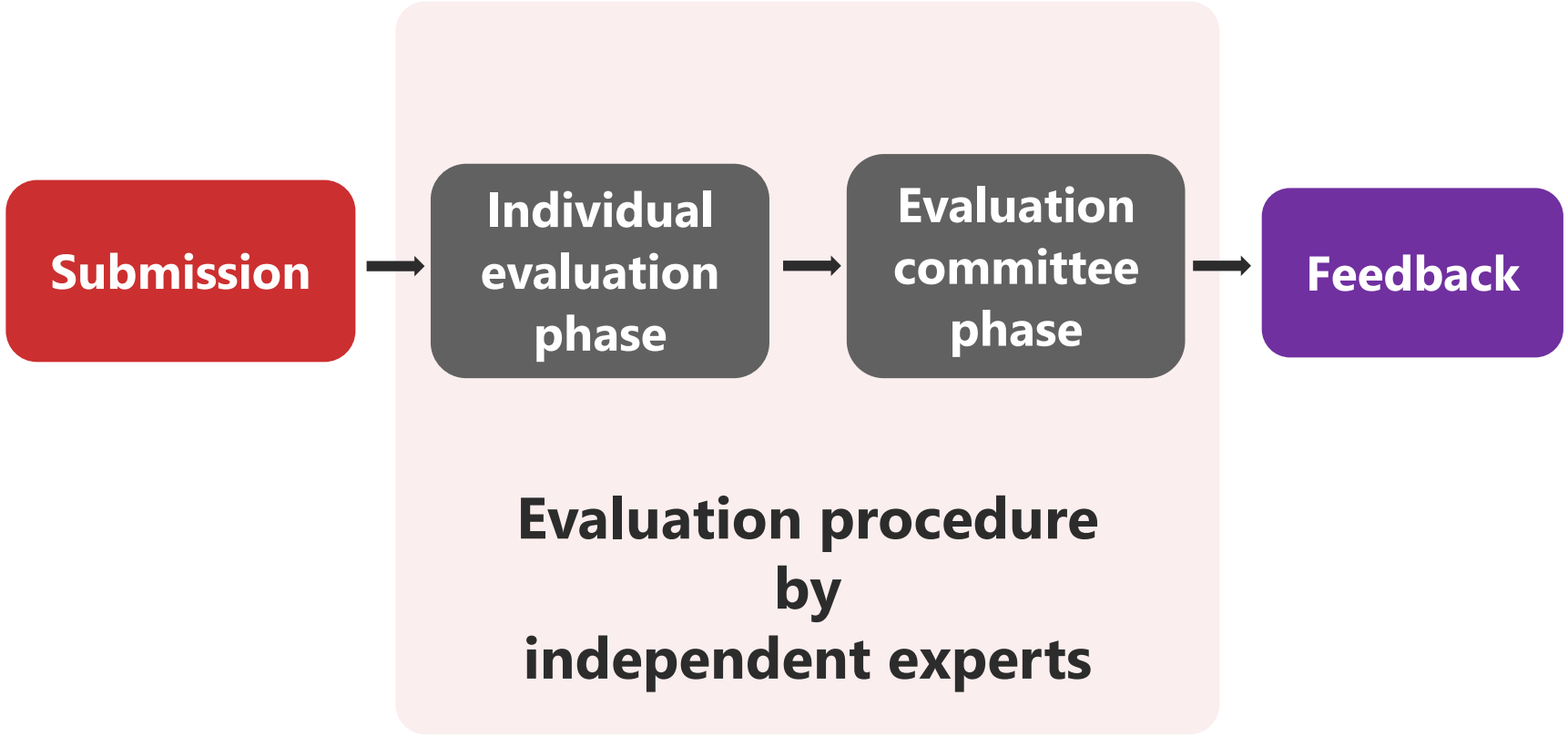
- **Part A**
  - to be filled in online (no page limit)
  - contains: administrative details, the summarised budget and call specific questions

- **Part B:**
  - to be uploaded as a single document (page limit: max. **20** A4 pages - Section 1 to 3)
  - contains: the technical description of the project. Modified to reflect the award criteria as indicated in the EIC Work Programme 2025.

Template available on the Funding and Tender Opportunities Portal

How is proposal funding determined?

European Innovation Council



Individual evaluation phase

European Innovation Council

- At least four EIC expert evaluators evaluate and score the proposals individually based on the **award criteria**:
  - **Excellence**
  - **Impact**
  - **Quality and efficiency of the implementation**
- The **score** for each evaluation criterion will be the **median of the evaluators' scores**.
- The **overall score from this individual evaluation phase** will be the **weighted sum** of the three median scores from the three award criteria.

Award criterion “Excellence”

European Innovation Council

Threshold **4/5**

Weight **60%**

- **Long-term vision:** How convincing is the vision of a radically new technology towards which the project would contribute in the long term?
- **Science-towards-technology breakthrough:** How concrete, novel and ambitious is the proposed science-towards-technology breakthrough with respect to the state-of-the-art? What advancement does it provide towards realising the envisioned technology?
- **Objectives:** How concrete and plausible are the proposed objectives to reach the envisaged proof of principle? To what extent is the high-risk/high-gain research approach appropriate for achieving them? How sound is the proposed methodology, including the underlying concepts, models, assumptions, alternative directions and options, appropriate consideration of the gender dimension in research content, and the quality of open science practices?
- **Interdisciplinarity:** How relevant is the interdisciplinary approach from traditionally distant disciplines for achieving the proposed breakthrough?

Award criterion “Impact”

European Innovation Council

Threshold **3.5/5**

Weight **20%**

- **Long-term impact:** How significant are the transformative positive effects to our economy, environment and society?
- **Innovation potential:** To what extent does the envisioned new technology have potential for generating disruptive innovations in the future and for creating new markets? How adequate are the proposed measures for protection of results and any other exploitation measures to facilitate future translation of research results into innovations? How suitable are the proposed measures for involving and empowering key actors that have the potential to take the lead in translating research into innovations in the future?
- **Communication and Dissemination:** How suitable are the measures to maximise expected outcomes and impacts, including scientific publications, communication activities, for raising awareness about the project results’ potential to establish new markets and/or address global challenges?

Award criterion “Quality and efficiency of the implementation”

European Innovation Council

Threshold **3/5**

Weight **20%**

- **Work plan:** How coherent and effective are the work plan (work packages, tasks, deliverables, milestones, timeline, etc.) and risk mitigation measures in order to achieve the project objectives?
- **Allocation of resources:** How appropriate and effective is the allocation of resources (comprising person-months and other cost items) to work packages and consortium members?
- **Quality of the consortium:** To what extent do all the consortium members have the necessary capacity and high-quality expertise for performing the project tasks?

Evaluation committee phase

European Innovation Council

- The evaluation committee will be composed of **EIC expert evaluators different** from those who evaluated the proposals individually;
- The **final score** will be decided based on the score from the individual evaluation phase and the outcome of the consensus discussions;
- **EIC expert evaluators** who evaluated and scored the proposals individually may be **invited to the consensus discussions**, in particular to clarify diverging evaluators' opinions.

Ranking list – Equal score resolution

European Innovation Council

Proposals with the same scoring will be untied based on the following factors, *in order*:

- higher score under the criterion Excellence
- higher score under the criterion Impact
- gender balance among the work package leaders as identified in the proposal
- number of applicants that are SMEs
- number of Member States and Associated Countries represented in the consortium
- if needed, other factors determined by the evaluation committee.

Feedback to applicants

European Innovation Council

Applicants will receive an **Evaluation Summary Report** that will comprise of:

- the **final score;**
- a **collation of the comments from individual reports**, or extracts of them;
- a **comment that summarises** the assessment by the evaluation committee;
- **additional comments,** possibly including advice not to resubmit proposal.

4 2025 EIC Pathfinder Challenges call & its main novelties

EIC Pathfinder challenges 2025

European Innovation Council

PATHFINDER CHALLENGES

Biotech for Climate Resilient Crops and Plant-Based Biomanufacturing	€ 30 million
Generative-AI based Agents to Revolutionize Medical Diagnosis and Treatment of Cancer	€ 30 million
Towards autonomous robot collectives delivering collaborative tasks in dynamic unstructured construction environments	€ 30 million
Waste-to-value devices: Circular production of renewable fuels, chemicals and materials	€ 30 million
Indicative call budget	**€ 120million**

Infoday on Pathfinder Challenges with Programme Managers in Spring 2025

EIC Pathfinder Challenges - introduction

European Innovation Council

- Build on **new, cutting-edge directions in science and technology**;
- Disrupt a market or create new opportunities **by realising innovative technological solutions** grounded in high-risk/high-gain research and development;
- Establish **a portfolio of projects** for each Challenge that explore different perspectives, competing approaches or complementary aspects;
- Proactively steered by **EIC Programme Managers**

Expected project outcomes

European Innovation Council

- Expected outcomes defined in the respective Challenge
- Project results should include **top-level scientific publications** as well as an **adequate formal protection of the generated Intellectual Property as well as an assessment of relevant aspects related to regulation, certification, and standardization**;
- Projects are encouraged to involve and empower within their teams **key actors** that have the potential to **become future leaders** in their fields such as excellent early-career researchers or promising high-tech SMEs, including start-ups;
- Project particularly encouraged to **empower female researchers** and achieve **gender balance** among the work package leaders.

Pathfinder Challenge Guides

European Innovation Council

- **Challenge Guides** will provide more information about:
  - **Objectives** of the Challenges
  - **Technical information** underpinning the objectives
  - **Portfolio considerations** used for the final selection of proposals to be funded
- Challenge Guides are already published on the EIC Pathfinder Challenges page

Biotech for Climate Resilient Crops and Plant-Based Biomanufacturing

European Innovation Council

Promotional video

Proposals should work on both specific objectives:

1. **Increasing plant growth, yields and resistance to stress through:**

i. Enhancing tolerance to stress combinations occurring due to different climate scenarios
ii. Increasing water use efficiency and nutrient use efficiency compared to current crops in commercial use
iii. Improving plant reproduction and seed filling processes under unfavourable conditions caused by combination of at least two stress factors
iv. Investigating and enhancing plant and soil microbiome interactions

2. **Substantially increasing the nutritional value (e.g. proteins, vitamins) in crops through plant native and non-native ingredients in crops.**

Generative-AI based Agents to Revolutionize Medical Diagnosis and Treatment of Cancer

European Innovation Council

Each proposal should focus on one (and only one) of the following diseases: breast cancer, cervical cancer, ovarian cancer, prostate cancer, lung cancer, brain cancer, stomach cancer or colorectal cancer. All proposals should address both technological areas:

- **Area 1: Technological area**

i. GenAI-based tools for Integrating Multidimensional Multimodal health Data

ii. Medical Data Augmentation

iii. Medical Knowledge Representation and Integration

- **Area 2: Clinical Area**

i. Predictive Diagnosis

ii. Enhance Personalized Treatment Selection

Promotional video

Towards autonomous robot collectives delivering collaborative tasks in dynamic unstructured construction environments

European Innovation Council

Each funded project shall deliver the following 3 specific objectives:

Promotional video

- **Objective 1:** Development of a simplified structural, load-bearing, material-robot building system to assemble a representative and future-relevant structure (pavilion) using a multitude of discrete modules (elements, segments, blocks, voussoirs). Solutions are expected to incorporate "design-for-robotic-assembly" aspects, such as the robot-material interfaces, module interfaces and connectors, and may include innovative approaches such as embedded sensing in the modules.

- **Objective 2:** Development of an autonomous mobile multi-robotic collaborative platform using at least two, preferably more, mutually aware collaborative robotic systems specifically designed for the assembly tasks outlined in Objective 1.

- **Objective 3:** Achieve a TRL4 demonstration of an autonomous assembly sequence using the demonstration building system developed in Objective 1, executed by the autonomous mobile multi-robotic collaborative platform developed in Objective 2.

Waste-to-value devices: Circular production of renewable fuels, chemicals and materials

European Innovation Council

Proposals should address one (and only one) of the following focus areas:

Area 1: Fully integrated waste-to-value devices

(i) Fully integrated solar reforming or synthetic biology devices

(ii) Integrated capture and conversion technologies

(iii) Membrane-based and electrochemical brine mining technologies

(iv) Ex-situ remediation devices based on microbial/enzymatic and/or photocatalytic degradation

Area 2: Understanding underlying mechanisms by means of computational material science and AI

Area 3: Cells from scratch by means of bottom-up synthetic biology

Promotional video

Can you apply? (1)

European Innovation Council

- **Single legal entities** established in a Member State or an Associated Country (mid-caps and larger companies will not be permitted)
- **Consortia of two entities** must be two independent legal entities from two different Member States or Associated Countries
- **Consortia of three or more entities** must include as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows:
  - at least one legal entity established in a Member State; and
  - at least two other independent legal entities, each established in different Member States or Associated Countries.
- The legal entities may for example be universities, research organisations, SMEs, start-ups, industrial partners or natural persons.

Can you apply? (2)

European Innovation Council

- **Important: associated partners** are not considered for eligibility rules!
- Examples of **ineligible** consortia:
  - 2 organisations from FR & 1 organisation from DE
  - 2 organisations from PL & 2 organisations from IT
  - 2 organisations from FR, 1 organisation from DE & 1 organisation from CA
- Examples of **eligible** consortia:
  - 1 organisation from MT & 1 organisation from CZ
  - 1 organisation from ES & 1 organisation from CH
  - 1 organisation from GR,1 organisation from SE & 1 organization from US

What support will you receive if your proposal is funded? (1)

European Innovation Council

- A **grant** for a **Research and Innovation Action** to cover eligible costs
- EIC considers proposals with an EU contribution of **up to € 4 million** as appropriate (larger amounts possible, if duly justified)
- Total indicative budget for this call: **€ 120 million** (expected to be allocated in approximately equal shares across the Challenges)
- Successful applicants will receive tailor-made access to a wide range of **Business Acceleration Services** and interactions with **EIC Programme Managers** and other actions in the portfolio of projects selected

What support will you receive if your proposal is funded? (2)

European Innovation Council

- Funding rate **100% of the eligible costs**
- Eligible costs will take the form of a **lump sum** and **the amount will be determined during the evaluation process**.
- Applicants must **propose the amount of the lump sum** based on their estimated project costs
- It is advised to include a **work package** dedicated to **portfolio activities** and allocate at least 10 person-month to it

How to apply: how long does it take?

European Innovation Council

- You must submit your application via the **Funding and Tender Opportunities Portal** before the given deadline.
- You will be informed about the outcome of the evaluation within **5 months from the call deadline** (indicative).
- If your proposal is selected for funding, you can expect your **grant agreement to be signed by 8 months after the call deadline**.
- The call will open on 28 July 2025.
- The deadline to submit the proposal is **29 October 2025 at 17.00 CET**.

Proposal submission (1)

European Innovation Council

- The Proposal Application Form is composed of **two parts**:

Part A
- to be filled online (no page limit)
- contains: administrative details, summarised budget and call specific questions.

Part B
- to be uploaded as a single document (page limit: max. **30** A4 pages – Section 1 to 3)
- contains: technical description of the project.

Proposal submission (2)

European Innovation Council

- The **estimated budget** must be described in a **detailed budget table**. This will be used as a basis for justifying and/or fixing the **lump sum amount**.

- Template will be available on the Funding and Tender Opportunities Portal

Keeping records when implementing the action

European Innovation Council

Applies for all Horizon Europe grants

To keep (e.g.)

- Technical documents
- Publications, prototypes, deliverables
- Documentation required by good research practices such as lab books
- ...any document proving that the work was done as detailed in Annex 1

No need to keep*

- Time-sheets
- Pay-slips or contracts
- Depreciation policy
- Invoices
- ...any documents proving the actual costs incurred

**Participants need to comply with financial record keeping obligations outside the grant agreement, if any (e.g., under national law or under internal procedures)*

Step 2: Portfolio considerations

European Innovation Council

- All proposals that meet the thresholds defined in the award criteria will be considered in step 2
- **Mapping of proposals in categories** stemming from overall goal and specific objectives of the Challenge (e.g., building blocks or subsystems, technical areas and/or competing technologies, platforms, applications areas, risk level and stage of technology readiness level, size)
- A **suitable portfolio of proposals** to be selected by evaluation committee by applying **portfolio considerations** in order to propose for funding a coherent set of projects that will achieve expected outcomes and impacts of the Challenge and maximise their impact.
- Further information and details about categories and portfolio considerations to be detailed in **EIC Pathfinder Challenge Guides**, which will be topic and domain specific
- Evaluation committee may also **propose some minor adjustments** to the proposals

Feedback to Applicants

European Innovation Council

- Applicants will receive an **Evaluation Summary Report** that will comprise of:
  - the **final score;**
  - **comments endorsed** by the evaluation committee;
  - **additional comments.**
- Applicants will also be informed about the **underlying portfolio considerations** in case their proposal was either retained for funding or not retained for funding while it received a score that was higher than other proposals retained for funding under the same Challenge.
- Comments on the detailed lump sum budget table will be provided in the Evaluation Summary Report only for proposals invited to grant agreement preparation (or placed in the reserve list) and ones rejected (in part) due to significant overestimation or underestimation of costs.

What happens after a proposal is evaluated and retained for funding?

European Innovation Council

- Successful applicants will be contacted and supported by **Project Officer** and relevant **EIC Programme Manager** during grant preparation
- Planning of **portfolio activities** - all projects in the Challenge Portfolio are expected to collaborate with each other
- Start of preparation of **Challenge roadmap**, which will define collective deliverables, activities and objectives of the portfolio of projects
- During the execution of the project: **continuous interaction** with Project Officer assigned to your project and the EIC Programme Manager assigned to the Challenge Portfolio of your project, who will oversee all the portfolio projects

5

Pathfinder Summary table

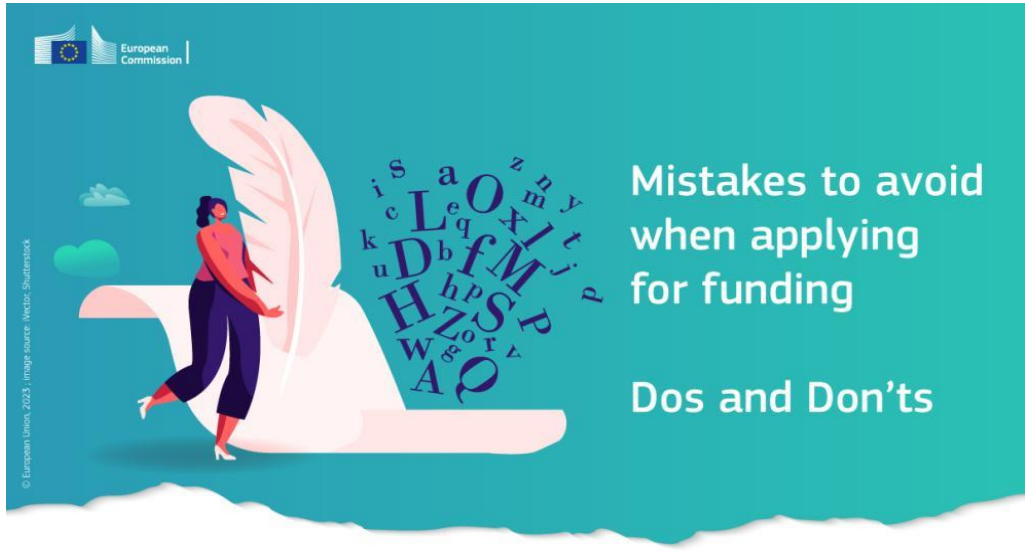
Pathfinder calls 2025 – Summary table

European Innovation Council

	Pathfinder Open	Pathfinder Challenges
Total budget	**€142 million**	**€120 million**
Proposals (indicative)	Up to €3 million or more if justified	Up to €4 million or more if justified
Funding rate	100% of eligible costs	100% of eligible costs
Opening	20 February 2025	28 July 2025
Deadline	21 May 2025 at 17.00 CEST	29 October 2025 at 17.00 CET
Length of proposal	20-page proposal (part B)	30-page proposal (part B)
Applicants	**Consortia:** min. 3 partners from 3 different Member States /Associated Countries of which at least 1 partner in a Member State	**Consortia:** • If 2 partners: from different MS/AC, • If 3+ partners: from min 3 different MS/AC of which at least 1 partner in a MS **Single legal entities** in a MS/AC

Applications

European Innovation Council



•Structure your proposal in a logical and cohesive manner. Outline the general project methodology and organise all elements of the project. This will help to align it with the objectives of the specific call and the evaluation criteria.
•Consider the other requirements or policy considerations that are assessed in the evaluation of projects. This may include aspects such as multi-disciplinarity (partners with complementary types of knowledge), the inclusion of Social Sciences and Humanities, Open Science, etc.

- Common mistakes to avoid when applying for Horizon Europe funding - European Commission

•Remember that the budget must match the workload in the different work packages, so that the project is feasible in terms of timing and financial resources.
•Create a timeline for the entire proposal writing process, including specific tasks, deliverables, responsibilities and deadlines. This will ensure that everything is completed by the call deadline.
•Use the guidance and the templates applicable to the funding programme you are applying for, available in the submission system on the Funding and Tender Portal. Remember that using the correct template is an admissibility condition

European Innovation Council

Thank you !

https://eic.ec.europa.eu

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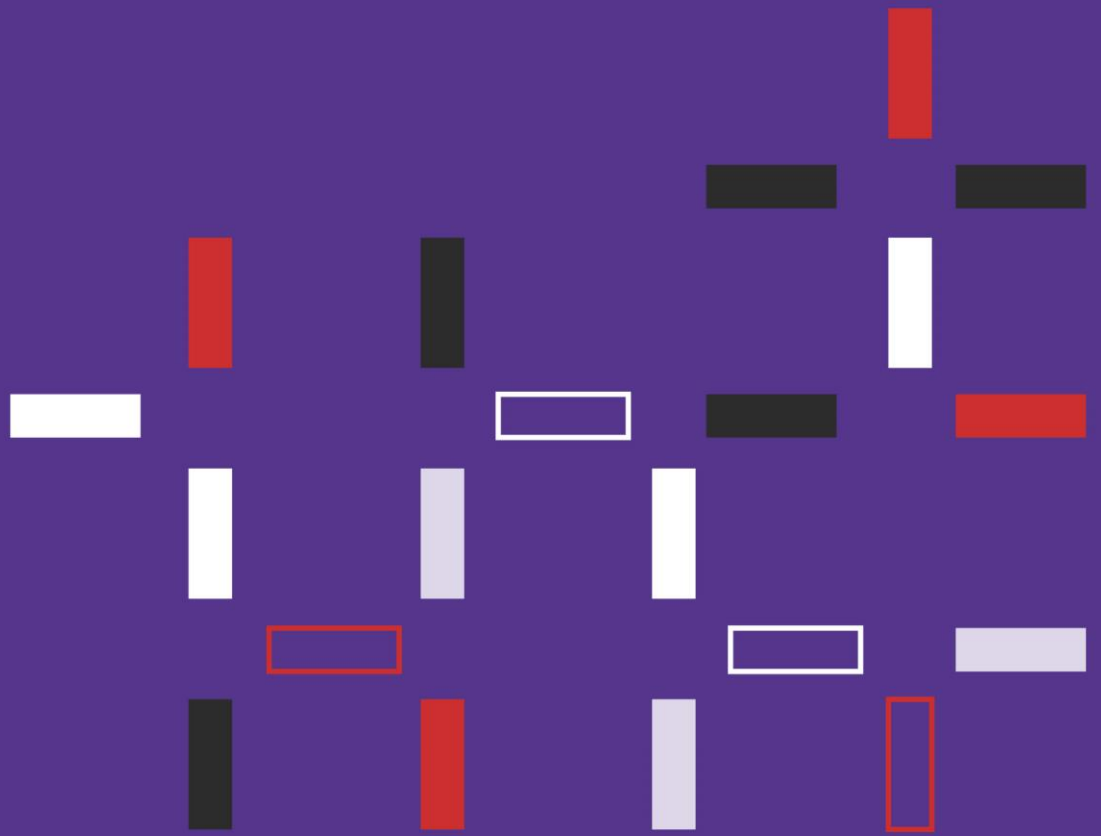

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