



Technical Assistance for Turkey in Horizon 2020 Phase-II

EuropeAid/139098/IH/SER/TR

Turkey in Horizon 2020 II

EIC Work Programme 2022 – What's in it for Turkish SMEs?

Webinar 10, 10:00 – 12:30

7th March 2022











Philip Sowden (UK)

- Background in manufacturing
- SME programmes at regional, national & International levels
- Worked with EC for over 30 years
- SME Key Expert on two previous projects in Turkey
- Responsible for SME programmes in the present project
- Visited and advised over 150 SMEs























Today's Presentation

We shall take a look at....

- The EIC
- What they offer to SMEs for 2022
- How they offer it
- How to improve your chances of success







So, what is the EIC?

- **EIC** established under Horizon Europe programme with budget of €10.1 billion.
- Supports 'game changing innovations' from early-stage research, through proof of concept to financing and scale-up of startups and SMEs.
- EIC steered by EIC Board, made up of 20 entrepreneurs, researchers, investors, corporates and others from innovation ecosystem.
- EIC and SME Executive Agency supports EIC Board and implements 3 main areas of EIC activity as set out in annual EIC Work Programmes.







EIC Board

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What is the purpose of EIC?







What is behind this ambition?

'Europe's most ambitious innovation initiative'

- €10 billion programme to identify, develop and scale up breakthrough technologies and disruptive innovations in Europe
- Unique in the world to combine research on emerging technologies with Accelerator for start-ups, SMEs and scaleups
- EIC set to become largest deep-tech investor in Europe (over €3 billion)
- Enhances the European innovation ecosystem (partnerships with EIT, ERC, etc.
- First work Programme adopted 18 March 2021, €1.5 billion
- Second Work Programme adopted 7 February 2022, €1.7 billion













Mainly aimed at SMEs...



1 to 250



Up to €50m turnover













SMEs are vital to Turkish economy



99.8% of Enterprises
73.8% of Employment
64.5% of GDP

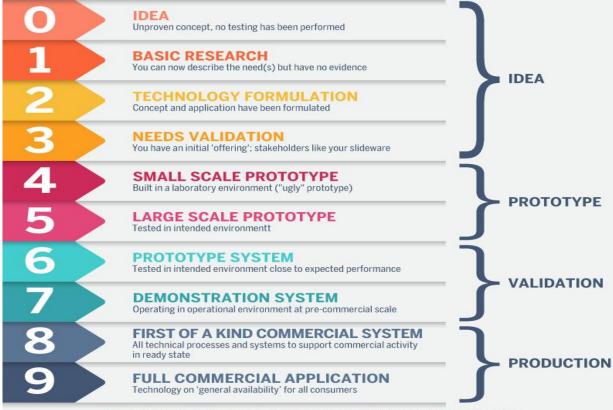






MEASURE YOUR TECHNOLOGY READINESS LEVELS - TRL

How technology ready is your service/product?



Technology Readiness Levels as adapted by the CloudWATCH2 project

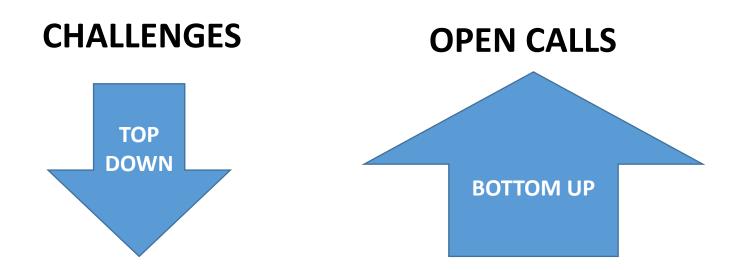
Find out more about CloudWATCH2 TRL: http://bit.ly/TRL_MRL







Where does the project inspiration originate?



SMEs, Universities, Research bodies, entrepreneurs, start-ups



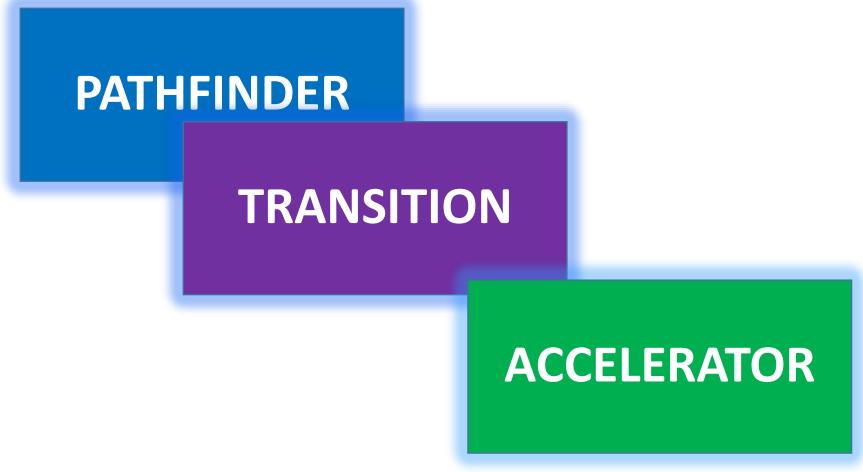








How is this delivered in practice?













PATHFINDER

PATHFINDER funds research to develop the scientific basis to underpin breakthrough technologies











How is PATHFINDER delivered?

PATHFINDER (TRL1-4)

- For consortia
- Early stage research on breakthrough technologies
- Grants of up to €3m

€350m total budget

- PATHFINDER Open Deadline 4th May
- Challenges Deadline 19th October
- 5 Challenges increased to 6 (€167m)
 - Carbon Dioxide and Nitrogen management
 - Energy Storage
 - Cardiogenomics
 - Healthcare continuum technologies
 - DNA-Based Digital Storage
 - Quantum Information Processing, Communication and Sensing

NEW











For PATHFINDER Open Consortia

Consortia have to include at least **3 legal entities** established in different EU Member States or Associated country – at least 1 must be in a Member State... 'legal entities' includes SMEs, universities, research institutes, etc.

3 key questions for applicants...

- Do you have a vision for a future technology that could make a real difference to our lives?
- Do you see a plausible way of achieving the scientific breakthrough that will make this technology possible?
- Can you imagine collaborating with an **interdisciplinary team of researchers and innovators** to realise the **proof of principle** and validate the scientific basis of the future technology?











What's in it for Turkish SMEs?





Opportunity to be in a **leading-edge consortium**

International networking of researchers in similar fields

A grant of up to €3m for each consortium — larger amounts are possible if justified

Funding of 100% of eligible costs

Up to €50,000 for complementary activities













What do evaluators look for?

Does the bid have collaborative, interdisciplinary research which meets the following...

- Does it give a convincing, long-term vision of a radically new technology that has the potential to have a transformative positive effect to European society and economy?
- Does it offer a concrete, novel and ambitious science-towardstechnology breakthrough providing advancement towards the envisioned technology?
- Does the bid have high-risk and high-gain research approach and methodology with concrete and plausible objectives?



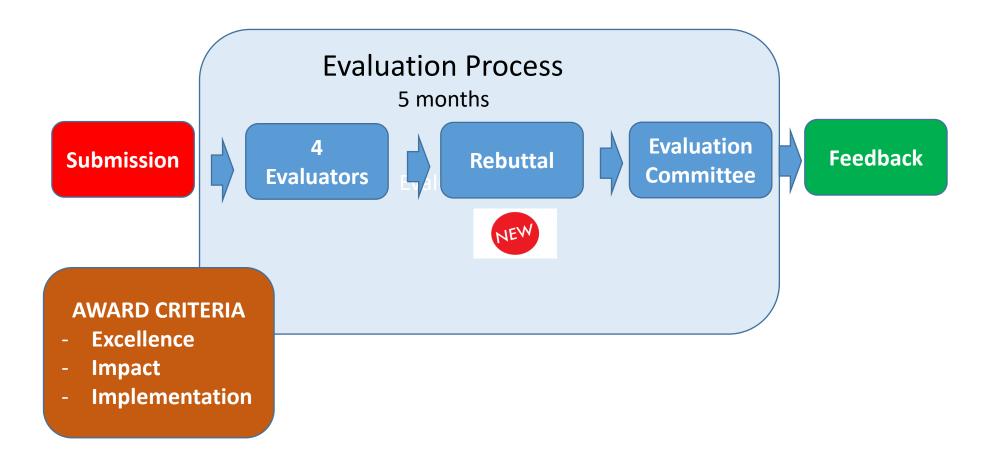








What is the process for PATHFINDER Open?













Excellence

• Long-term vision of radically new technology



- Science-towards-technology breakthrough how concrete, novel and ambitious is it compared to state of the art? What advancement does it provide?
- **Objectives**: how concrete and plausible are they? To what extent will the research approach achieve them? Methodology?
- Interdisciplinarity: How relevant is the approach compared to traditional disciplines?

Threshold Weight 60%











Impact

- Long-term impact: How significant are the potential transformative effects for the economy, environment and society?
- Innovative potential: How adequate are proposed measures to facilitate future translation of research results into commercial innovations?
- Communication and Dissemination: How suitable are the measures to maximise expected outcomes and impacts, including awareness raising on results' potential to establish new markets and address new markets?

Threshold 3.5/5

Weight 20%





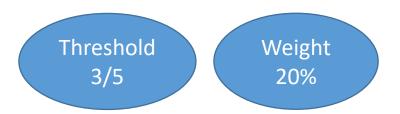






Quality & Efficiency of Implementation

- Quality of Consortium: Do they have all the necessary high quality expertise?
- Work Plan: How coherent and effective is it? Includes work packages, tasks, deliverables, milestones, timing and risk mitigation.
- Allocation of Resources: How appropriate and effective is the allocation of resources to tasks and consortium members?









PATHFINDER Open May 2021 Cut-off



868 Proposals evaluated

56 projects chosen

29 countries

322 participants

- 45% Higher Education
- 28% Research Organisations
- 24% Private
- 3% other

€3m average project value

€168m overall spend

PATHFINDER Challenge 2021



- 433 proposals evaluated;
- 5 projects chosen so far
- evaluations ongoing

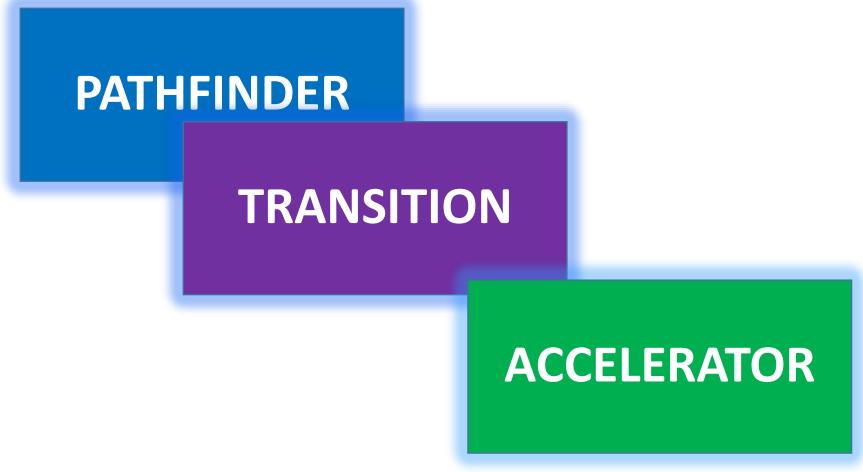
Selection criteria are similar to Open, but some differences - refer to EIC web site – main differences:

- Grants up to €4m
- Available to consortia or single legal entities
- Can be 2 in consortium
- Evaluation based on Excellence, Impact and Implementation, as Open
- No rebuttal procedure





How is this delivered in practice?













TRANSITION

TRANSITION supports the maturation and validation of novel technologies beyond proof of principle (TRL 4-6) and business activities towards commercialisation











How is TRANSITION delivered?

TRANSITION (TRL 4-6)

- For consortia and single entities
- Technology maturation from proof of concept to validation
- Business & market readiness
- Grants up to €2.5 million

TRANSITION Open and Challenges – 1st Deadline 04/05/22, 2nd Deadline 28/09/22

• 2 Challenges increased to 3 (€60.5m)



- Green digital devices for the future
- Process and system integration of clean energy technologies
- RNA-based therapies and diagnostics for complex or rare genetic diseases
- Dedicated Challenges Info Day on 09/03/22







What's in TRANSITION for Turkish SMEs?



Successful outcomes from:

- H2020 FET schemes
- EIC Pilot Programme
- ERA NET call FET (CHIST-ERA, QUANT-ERA, FLAG-ERA)
- ERC PoC Projects





For TRANSITION Consortia

- Consortia can be 2 or 3 legal entities established in different EU
 Member States or Associated country full definition from EIC web
 site.
- Eligible Projects started more than 12 months ago or ended les than 24 months before call deadline.
- You do not have to be a participant or result owner of previous project...
- ...however, you need to **prove the commitment** from the owner to negotiate access to the results.

3 key questions for applicants...

- Is this a **novel technology ready** for the next steps?
- Have you performed early explorations of market(s)/competition?
- Do you have a motivated and diverse team for commercialisation?











What do evaluators look for?

Does the applicant provide convincing answers to the following...

- Is the novel technology **ready for the next steps** towards its maturation and validation in some specific applications?
- Has the applicant performed early exploration of potential markets for the innovation as well as studied potential competitors?
- Does the applicant envisage building a motivated and diverse team to develop the idea towards commercialisation?



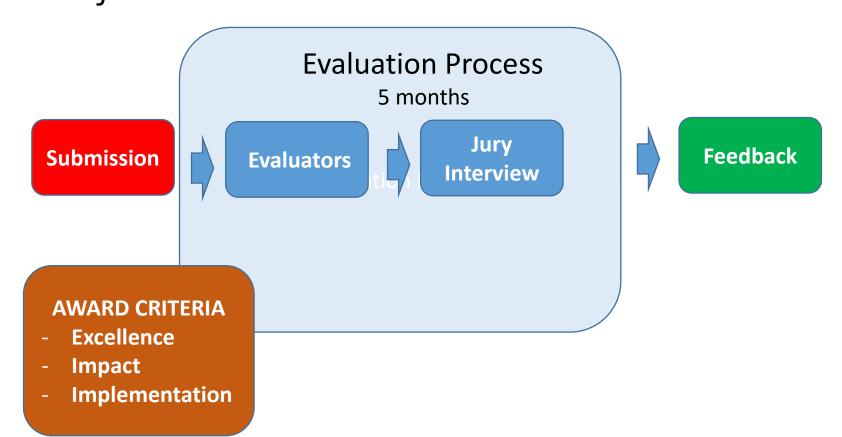








What is the process for TRANSITION Projects?













Excellence

- Technological Breakthrough the technology's level of novelty and its applicability to potential breakthrough uses and functionalities
- Technology Feasibility the application's feasibility, based on the results of the previous technology demonstration
- Objectives the proposal's objectives' suitability to the proposed development of the technology and the planned validation activities











Impact

- Business and Market Fit does the application contribute sufficiently to the commercialisation of the technology's final product?
- Economic and/or Social benefits the capacity to create considerable demand in European/Global markets as well as positive impacts on employment, environment, societal, etc.
- Entrepreneurship Will the proposed project help to create an entrepreneurial capability in the team?
- Partnerships and Investment Readiness The level of effectiveness to making the innovation ready for investors.











Quality & Efficiency of Implementation

- Quality of Team: Do they have all the necessary high quality expertise to advance the commercial value of the emerging technology?
- Milestones and Work Plan: How coherent and effective is it?
- Allocation of Resources: How appropriate and effective is the allocation of resources to tasks?











Feedback from 2021

- TRL 3 is the starting point in the proposal it can't be less
- TRL 4 is preferred as to avoid surprises due to technological risk
- Preliminary business and market exploration must be integral parts of the proposal, not added as afterthoughts
- Business model validation and planning next steps are equally important as the technology development and cannot be delegated











Feedback from Jury members

More clarity is needed on...

- Distinct technical milestones
- Ownership of IPR
- Allocation of budget and corresponding resources
- Understanding of technical and business risks
- Actual and expected TRLs
- Interdependence of work packages and tasks
- The team for future exploitation
- The credibility of the business objectives











NEW for 2022

- Length of Proposal = 20 pages
- Cover Page: must include declaration about linked project and ownership of IPR
- If Applicant is not Owner: A letter from owner must be uploaded as separate file
- Eligible linked projects: List will be provided







TRANSITION Open 2021



292 Proposals evaluated

29 projects chosen

24 countries

€3.4m average project value

€99m overall spend

TRANSITION Challenge 2021

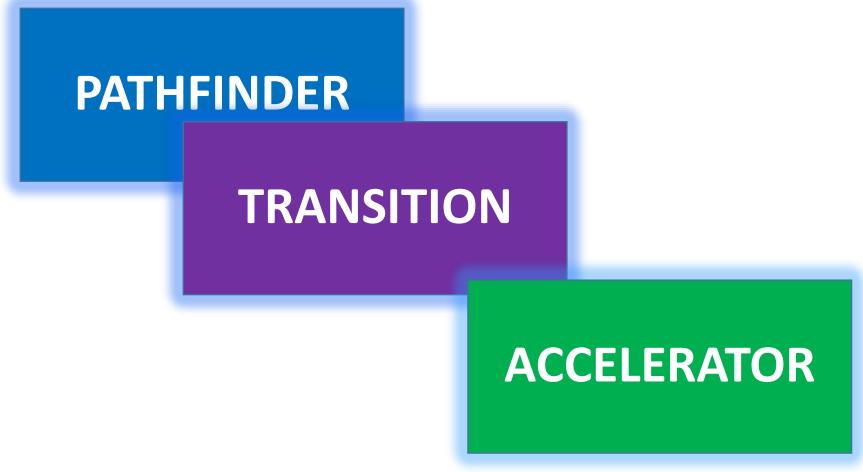


- 13 projects chosen
 - 9 Medical technology and devices
 - 4 Energy harvesting and storage technologies





How is this delivered in practice?













ACCELERATOR

ACCELERATOR supports start-ups and SMEs seeking to...

- Scale up high impact innovations with the potential to create new markets
- Innovations building on scientific discovery or technology breakthroughs (deep tech)
- Innovations where significant funding is needed over a long timeframe and are too risky for private investors











How is ACCELERATOR delivered?

Accelerator (TRL 5/6-9)

- For individual SMEs
- Development & scale up of deep-tech/ disruptive

innovations by start-ups/SMEs

 Blended finance (grants up to €2.5 million; equity investment up to €15 million or above)

ACCELERATOR Open – Apply any time FULL PROPOSALS and Challenges - Deadlines 23/03/22, 15/06/22 and 05/10/22

2 Challenges:

- Technologies for open and strategic autonomy (healthcare, critical raw materials, security, etc.)
- Technologies for 'Fit for 55' (energy, buildings, land use, etc.)







What's in ACCELERATOR for Turkish SMEs?

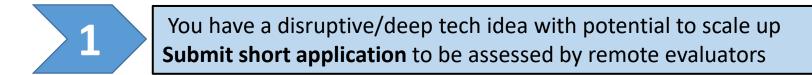


- **Grant Only** (with other finance)
- Grant First (with equity follow up)
- Grant and Investment (Blended Finance)
- Investment Only





Accelerator 5 stage application process



If accepted, there is help to prepare a Business Plan and draft a proposal with AI tool and coaching. Submit a full proposal

Full proposal is assessed by remote evaluators

If accepted, the innovation project is **pitched** in front of **EIC Jury**Members. If selected you sign the grant agreement

For **investment component**, due diligence process is done, plus compliance checks. If successful, **Investment Agreement** signed











EIC Al-Based Platform: First Stage

DISCOVERY

Applicants

Identifies relevant funding sources

DIAGNOSTIC

Applicants

Assesses your innovation and helps prepare your short proposal

DESIGN

Applicants

Accesses support from Mentors and helps prepare a full proposal

EVALUATION

Evaluators

Assesses innovation projects with insights











Excellence

- High-risk, high potential idea
- Different to anything else on market novel
- Highly innovative ideally disruptive
- Beyond 'State-of-the-Art'
- Good understanding of risks associated with introduction to market
- Convincing outcome and criteria for success











Impact

- Convincing evidence of potential new or expanded markets
- Potential customer sector, base, scale
- Realistic view of market potential and how product/service will be able to scale up
- Strategic plan for commercialization
- European/global dimension
- Evidence of 'Freedom to Operate'











Quality and Efficiency of the Implementation

- Evidence that funding cannot be leveraged from other sources
- Technical and business experience of the team good balance and plan to acquire missing competences, if applicable
- Availability of human and physical resources use of partnerships, other stakeholders, subcontractors
- Realistic and achievable timeframe and associated work packages
 - milestones, risks against ambitions, associated budgets











Successful first stage applications

- Feedback from evaluators
- Business strategy/plan
- 3 free days of remote coaching
- Submit full proposal within 12 months of response date of first application







EIC AI-Based Platform: Second Stage

DISCOVERY

Applicants

Identifies relevant funding sources

DIAGNOSTIC

Applicants

Assesses your innovation and helps to prepare your short proposal

DESIGN

Applicants

Gives access to support from Mentors and helps prepare a full proposal

EVALUATION

Evaluators

Assesses innovation projects with insights











Unsuccessful full proposals

- First time rejected If jury see good potential - can resubmit once, to one of next 2 interviews
- Rejected: criteria not met can resubmit once to second stage.
- Meets 'Excellence' and 'Impact', but EC funding not justified – Can re-submit once to second stage.
- Rebuttal Process response for new evaluators to consider
- Second time rejected applicant will not be allowed to resubmit application for 12 months. Starts at Stage 1 again.





ACCELERATOR 2021



5,000 Short applications evaluated

144 selected for funding

96 Blended finance, 34 Grant first,

9 Grant only, 5 Equity only

3 weeks average time to inform at first stage

Total funding up to €991m





Evaluator feedback

Top reasons for 'NO GO'

- Lack of understanding of the market and competition
- 2. Quality and composition of team
- 3. Business model
- Lack of involvement of early users/customers
- 5. Novelty/disruptiveness of innovation
- 6. Wrong timing in terms of TRL,USP, feasibility

Top reasons for 'GO'

- Novelty and disruptiveness of the innovation
- Quality and composition of team
- Understanding and knowledge of the market competition
- 4. Involvement of users and early customers
- 5. Business model
- 6. Appropriate timing





Changes for 2022

- Simplified 'Seal of Excellence' rules
- Rebuttal process
- Investments above €15m on Accelerator
- EIC Scale-up 100 Initiative will identify 100 potential unicorn businesses for additional support
- High-level expert group on late-stage scale-up financing











Additional support for women innovators

- Transition Call priority interview phase for women-led projects (women-led companies or 50% of work package leaders
- Accelerator Call Broader definition of women-led company (now includes Chief Technology/Scientific Officer as well as CEO)
- Pilot European Gender and Diversity Index to define, collect and track data across European innovation ecosystems
- €10m budget for WomenTech.eu (up from €4m in 2021) to support approx. 130 female deeptech founders (€75,000 grants)











EIC additional activities for 2022

- Coordination and support actions building stakeholder engagement, enhancing synergies with other programmes
- Developing AI tool further
- Developing AI tool training
- Further development of mentoring programme and other support to applicants
- Using more external expertise











SUMMARY

- A huge amount of support from idea through to commercialisation – but hard work needed to get it
- Read the aims, objectives and requirements carefully and make sure you have them covered
- Make your project fits requirements no chance of fitting requirements to suit your project
- Look for customer needs, then develop appropriate ideas and make sure that you can implement through to commercialisation
- Don't look at what you are good at implementing, then seek and idea to fit and look for funding without considering if there is a customer need!











Further information

EIC Work Programme 2022

https://eic.ec.europa.eu/eic-work-programme-2022

Horizon Europe

Horizon Europe | European Commission (europa.eu)

European Innovation Council

European Innovation Council (europa.eu)

Turkey in Horizon 2020 Project

Turkey In Horizon 2020 | Ufuk Avrupa











Thank you for joining us today!

















