TOWARDS EFFECTIVE INDICATORS AND RANKING SYSTEMS THROUGH INCREASED INTER-SECTORAL COOPERATION

Measuring Third Mission. The E3M Project.

Indicators and Metrics. Advantages, Risks and Benefits.

Metrics, Indicators and Rankings.

Conclusions

Suggestions to Stakeholders

Brussels, April 30, 2013

Centro de Gestión
de la Calidad y del Cambio

MEASURING THIRD MISSION

- All this presentation will review different questions related with use of metrics, indicators and rankings, in what refers to Universities Third Mission.

- A first essential questions to state (and answer) is what is what we are trying to measure:

  ## WHAT IS UNIVESITY' THIRD MISSION?

- To deal with these questions, E3M project was developed during 2009-2012
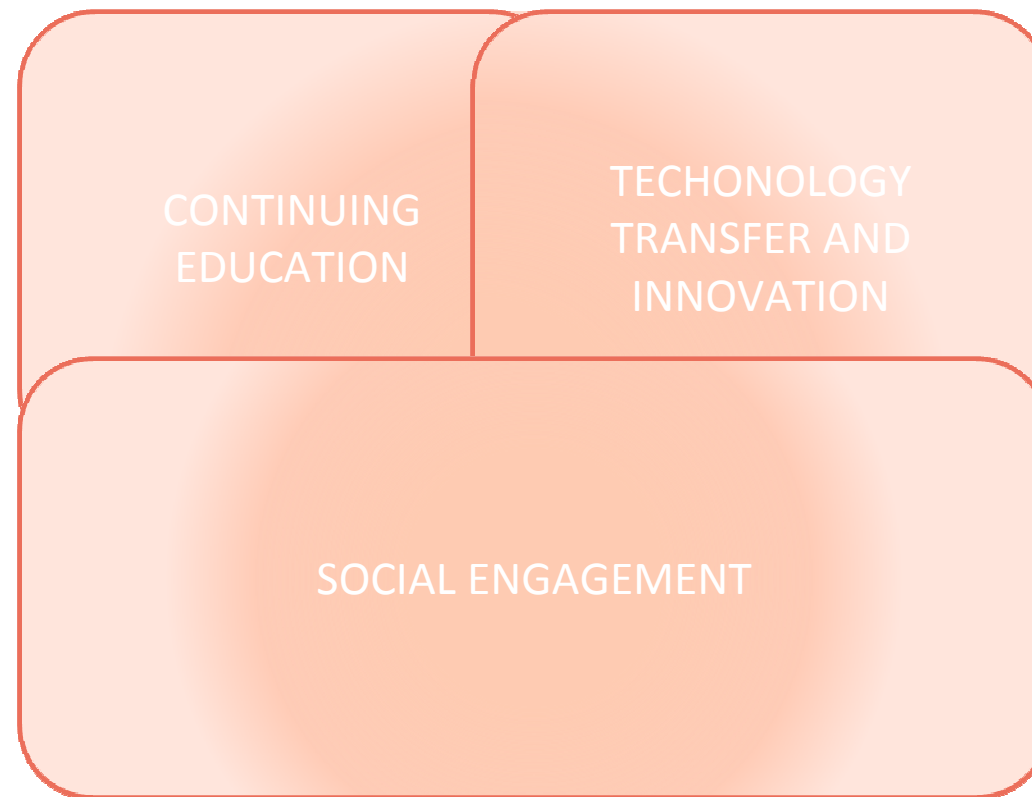
THE E3M PROJECT

- Lifelong Learning Programme*

- 8 partners / 7 countries

- Tarjets:
  - Reviewing Third Missions Concept
  - Defining Indicators and Metrics for Thrid Mission
  - Evaluating ranking methodology

- One of the main final outputs was the Green Paper "*Fostering and Measuring "Third Mission´ in Higher Education Institutions*"

European Indicators and Ranking Methodology for University Third Mission

www.e3mproject.eu

Green Paper
Fostering and Measuring 'Third Mission'
in Higher Education Institutions

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WHAT IS THIRD MISSION?

Consultancy

Collaborative research projects

Non-academic organizations

Licensing

Patents

Business incubators

Applied Research

Technology Transfer

Companies

Shared laboratories

& Innovation

Spin-offs

Cooperation

Facilities

Mobility of people

International

Start-ups

Technology parks

cooperation

Volunteering

Community service projects

Sharing of space

Social Engagement

Political participation

Membership of

Access to libraries

Community boards

Cultural events

Senior populations

Seminars

Grants

Educational activities

Life Long Learning

Programs

Business opportunities

Continuing Education

Teaching

Fee management

e-Learning

Sponsoring of education

Sponsorship

THE THREE DIMENSIONS OF THIRD MISSION

CONTINUING EDUCATION

TECHONOLOGY TRANSFER AND INNOVATION

SOCIAL ENGAGEMENT

THIRD MISSION

- Third Mission activities can be grouped into processes which can be considered common, regardless of the organizational structure each institution has to carry them out.

- The E3M project website (www.e3mproject.eu) lists the processes to be developed in each of the three dimensions included in the Third Mission, as well as information about how they have been defined.

INDICATORS AND METRICS

- Adequately describe a complex phenomenon as Third Mission, requires the use of different measures of what institutions are doing and achieving.

- To do this, the adequate tool requires the use of metrics and indicators.

- While frequently both terms as used indistinctively, their concept is different.

INDICATORS AND METRICS

- Metrics are precisely defined quantitative assessments of the state of a particular parameter that is postulated to be reliable, robust and of interest for some purpose.
  - Some contextual knowledge and a sense of the history of the readings is usually needed.

- Indicators are devices that indicate the extent to which managers need to worry about the feature.
  - An indicator may be the result of applying expert judgment to a basket of measures (maybe metrics) and qualitative reports.

- We use 'measures' to include both metrics and indicators.

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ADVANTAGES AND RISKS

- Good indicators and metrics can serve to provide a handle on things that were previously hard to grasp; they render such activities visible, monitorable and to an extent influenceable or manageable.

- But therein also lie dangers: The temptation, once one has a metric, is to start to *over-interprete* the metric, believing things about what it is saying (things that may not be true).

  - If funding is attached to a metric then its visibility is immediately increased, often resulting in severe distortions. In this case, measurements can generate unintended consequences.

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ADVANTAGES AND RISKS

- Metrics should only be selected if enhancement of their value assists the organization to achieve its strategy. If this is not the case, they are likely to result in unintended consequences.

- If expertly conducted, qualitative descriptions and judgments can be as valuable as measurements.

- In complex multifactorial circumstances, isolated metrics can be misleading. Joint consideration is needed.

ADVANTAGES AND RISKS

- Efforts to measure Third Mission activity may initially be greeted with mistrust.

- If trust is established, then much of the previously hidden activity will be revealed and can be recognized and reported.

- Third Mission activities are difficult to identify and to track within universities, not least because in the past administrations may have unwittingly driven such activity underground.

- As there has until recently been little call to collect and display data to track Third Mission activities, there will be a cost attached to the introduction of new metrics.

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ADVANTAGES AND RISKS

- If the intention is faithfully to record the richness and scope of Third Mission activity in an institution, probably dozens of indicators and metrics will be needed.

- If the intention is to rank institutions in terms of their Third Mission performance, a shorter set of measures will be needed, carefully selected as before, but with different criteria.

- Senior managers and policy-makers might require display of a maximum of three or four 'strategic metrics and indicators' that act as proxies for the many more detailed measures.

- These approaches are inevitably somewhat in conflict, and display different fallibilities.

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BENEFITS

- Good indicators and metrics, well and responsibly handled, can…:
  - Offer a dashboard for the first time, allowing managers to take informed decisions.
  - Make visible previously largely hidden activities.
  - Allow these activities to achieve more prominence, and perhaps, once measured, to attract funding.
  - Allow strategic planners to work with other institutions, and to learn from each other.
  - Allow the evaluation of the own performance and the achievement of strategic objectives

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METRICS, INDICATORS AND RANKINGS

- We have stood back from developing a ranking methodology for production of a European league table of Third Mission performance,

  - Doing so generally would mean missing the extraordinary diversity and variability in mission, profile and quality, evident among the universities on Europe, let alone the rest of the world.

  - Specially for Third Mission, and specially for the Social Engagement part of Third Mission, rankings can move attention from the impact one is achieving as an institution, to competing, perhaps superficially in metrics rather than in substance, with other institutions.

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METRICS, INDICATORS AND RANKINGS

- We see significant potential for the use of Third Mission metrics, however, to provide comparisons for small groups of comparable institutions. Institutions would select baskets of metrics (carefully selected sets) that support their particular missions and strategies.

- We imagine that governments might come, in time, to include 'Third Mission' impact as part of the Balance Sheet, as an increasingly explicit part of the social contract between state and institution.

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NEED FOR FURTHER WORK

- Project Green Paper goes some way towards sharing ideas and increasing transparency in regard to Third Mission vision, management and conduct.

- This project does not complete the work of devising and testing Third Mission indicators and metrics – rather it seeks to engage an intelligent debate by offering a conceptual framework and a set of measures that have been subjected to a high degree of scrutiny and contestation.

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NEED FOR FURTHER WORK

- We are convinced that it will be routine, in several decades´ time, to record and measure Third Mission activity, while coordinating and facilitating it lightly.

- Progress should not be hurried: it could be more damaging to measure the wrong thing than not to measure anything at all.

- The process should be taken moderately and intelligently forward despite the risks, because there is a social demand.

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CONCLUSIONS

- The social engagement of universities should be a commitment rather than a competition.

- Well-chosen metrics and indicators can provide effective tools for decision-making, based on each institution's strategic goals rather than a global conception of what an excellent university should be.

- The prize for getting it right will be considerable: more self-confident and productive universities, engaged in the cultural and economic development of their host societies.

- If rankings are to be used, then they need to be within coherent sets of comparable universities, and choosing baskets of metrics, from the full set, that accurately reflect the nature of their engagements with society.

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SUGGESTIONS / IDEAS

- To Institutions and their leaders
- To Academic staff
- To Business people and others in public roles in society
- To Public officials and politicians
- To all the stakeholders

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TO INSTITUTIONS AND THEIR LEADERS

- Revitalize their social contract with society by building commitment to Third Mission

- Support and celebrate the activity, and engage with local authorities and the other high-level institutions of society

- Influence the culture of the institution so that academic staff and students are as readily motivated to engage with society

- Protect meritorious initiatives, where possible, from random detrimental variations in funding or policy;

- Foster an ambiance that allows considerable freedom, under light but appropriate governance arrangements.

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TO ACADEMIC STAFF:

- Develop their own personal share of the Third Mission social contract with society - as senior members of the university, depending upon their strengths and interests;

- Behave entrepreneurially both academically and through external engagement;

- Engage in trusting relationships and activities with non-academic people, including both expert support staff within, and people outside the university.

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TO BUSINESS PEOPLE AND OTHERS IN PUBLIC ROLES IN SOCIETY:

- Trust, engage and work with university people, looking for inputs of innovation and energy, knowledge and skills;

- Make allowances for the particular culture within universities, which typically differs markedly from that found in the commercial world, but is not 'worse';

- Adopt a medium-term horizon for the timing of projects.

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TO PUBLIC OFFICIALS AND POLITICIANS:

- Facilitate the recovery of the social contract between universities and society through Third Mission activity, using whatever (financial and other) instruments they have at their disposal

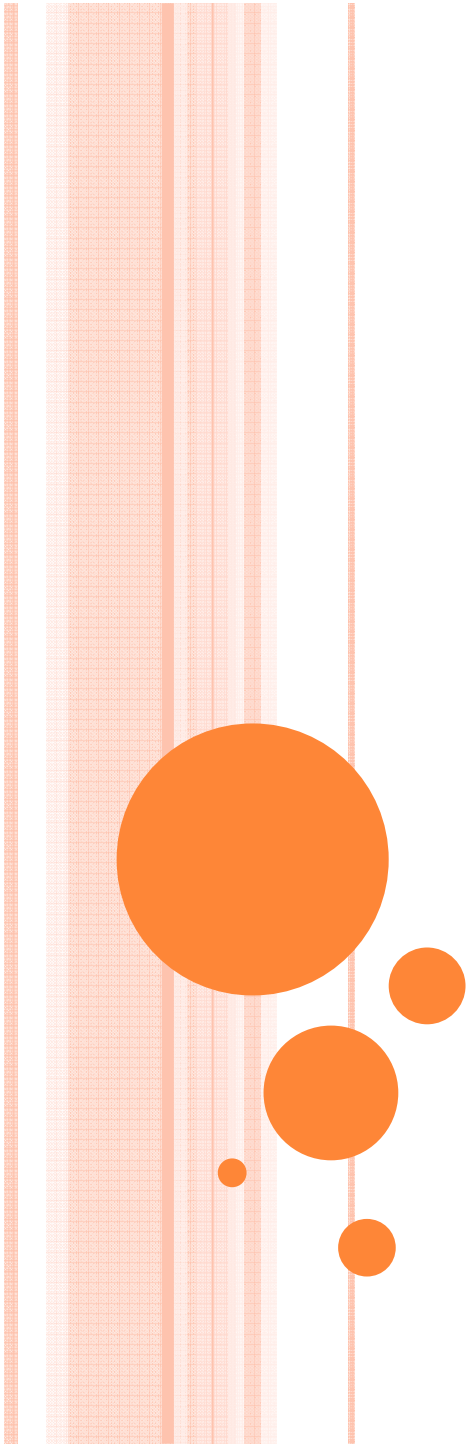- Abstain from rapid and/or repeated changes in funding or policy regimes.

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TO ALL THE STAKEHOLDERS

- Combine forces to promote and support the difficult, but important, work of developing suitable metrics and indicators to represent the range of Third Mission activity - without causing woeful unintended consequences - over a reasonable timescale: neither long nor hurried.

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Thank you

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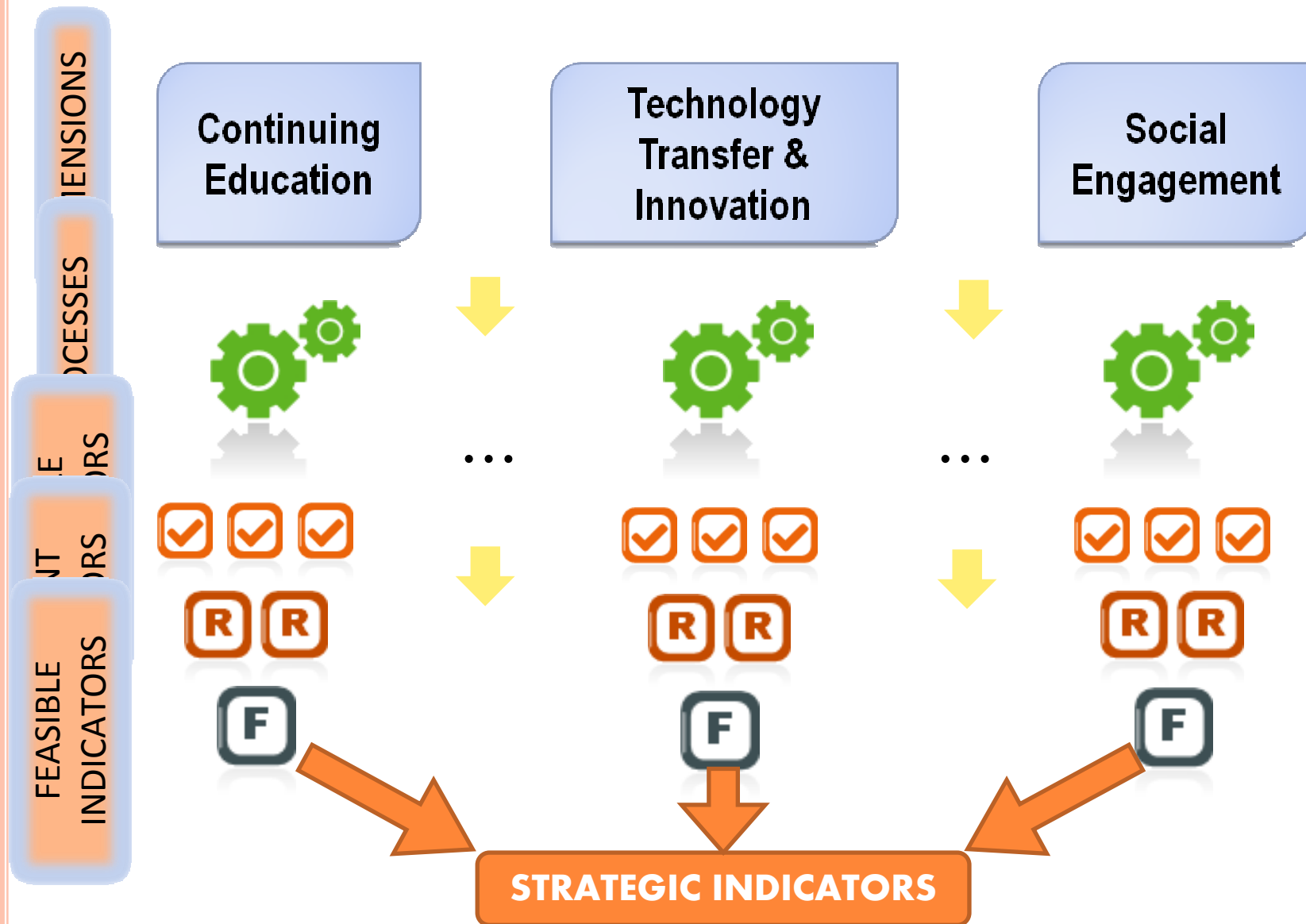
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EXAMPLES OF RISKY MEASUREMENTS

- Funding liked to:

  - University 'output' (Number of students graduated 'On time')
    - General ambiance of relaxing difficulties for students

  - Academic Ratings of students coming to University
    - Offering less places to increase the entrance rating (not by problems of capacity, just to improve this figure!!!)

METHODOLOGY

INDICATORS
CONTINUING EDUCATION

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CE Indicators
CE0-I1: PRESENCE OF CE IN THE MISSION OF THE HEI
CE0-I2: PRESENCE OF CE IN THE POLICY AND/OR THE STRATEGY OF THE HEI
CE0-I3: EXISTENCE OF AN INSTITUTIONAL PLAN FOR CE IN THE HEI
CE0-I4: EXISTENCE OF QUALITY ASSURANCE PROCEDURE FOR CE ACTIVITIES
CE1-I1: CE PROGRAMMES ACTIVE FOR IMPLEMENTATION
CE1-I2: CE PROGRAMMES DELIVERED WHICH HAVE A MAJOR AWARD UNDER HIGHER EDUCATION SYSTEM
CE1-I3: PARTNERSHIP WITH PUBLIC AND PRIVATE BUSINESS CE PROGRAMMES DELIVERED IN THAT YEAR
CE1-I4: INTERNATIONAL CE PROGRAMMES DELIVERED
CE1-I5: FUNDED CE TRAINING PROJECTS DELIVERED
CE1-I6: CREDITS OF THE DELIVERED CE PROGRAMMES
CE4-I1: CREDITS ENROLLED
CE4-I2: REGISTRATIONS IN CE PROGRAMMES
CE4-I4: CE CREDITS ENROLLED REFERRED TO THE TOTAL CREDITS ENROLLED
CE6-I1: QUALIFICATIONS ISSUED REFERRED TO TOTAL CE REGISTRATIONS
CE7-I1: STUDENTS SATISFACTION
CE7-I2: KEY STAKEHOLDER SATISFACTION
CE7-I3: COMPLETION RATE FOR ALL PROGRAMMES
CE8-I1: CE PROGRAMMES WITH EXTERNAL ACCREDITATIONS

INDICATORS
TECHNOLOGY TRANSFER AND INNOVATION

TTI Indicators
TTI0-i1: PRESENCE OF TTI IN THE MISSION OF THE HEI
TTI0-i2: PRESENCE OF TTI IN THE POLICY AND/OR STRATEGY OF THE HEI
TTI0-i3: EXISTENCE OF AN INSTITUTIONAL ACTION PLAN FOR TTI IN THE HEI
TTI1-i1: LICENSES, OPTIONS AND ASSIGNMENTS (ACTIVE AND EXECUTED, EXCLUSIVE AND NON-EXCLUSIVE) TO START-UPS OR SPIN-OFFS AND EXISTING COMPANIES
TTI1-i2: BUDGET COMING FROM REVENUES FROM COMMERCIALISATION OF HEI KNOWLEDGE
TTI2-i1: START-UPS AND SPIN-OFFS ESTABLISHED
TTI3-i1: CREATIVE COMMONS AND SOCIAL INNOVATION PROJECTS THAT HEI EMPLOYEES ARE INVOLVED IN
TTI4-i2: R&D SPONSORED AGREEMENTS, CONTRACTS AND COLLABORATIVE PROJECTS WITH NON-ACADEMIC PARTNERS
TTI4-i3: BUDGET COMING FROM INCOME OF R&D SPONSORED CONTRACTS AND COLLABORATIVE PROJECTS WITH NON-ACADEMIC PARTNERS
TTI4-i4: CONSULTANCY CONTRACTS
TTI4-i5: POSTGRADUATE STUDENTS AND POSTDOCTORAL RESEARCHERS DIRECTLY FUNDED OR CO-FUNDED BY PUBLIC AND PRIVATE BUSINESSES
TTI5-i1: CREATED (CO-FUNDED) OR SHARED LABORATORIES AND BUILDINGS
TTI6-i2: COMPANIES PARTICIPATING IN CONTINUOS PROFESSIONAL DEVELOPMENT COURSES (CPD)
TTI6-i3: HEI EMPLOYEES WITH TEMPORARY POSITIONS OUTSIDE OF ACADEMIA
TTI6-i4: NON-ACADEMIC EMPLOYEES WITH TEMPORARY POSITIONS AT HEIS
TTI6-i5: POSTGRADUATE THESES OR PROJECTS WITH NON-ACADEMIC CO-SUPERVISORS
TTI6-i7: JOINT PUBLICATIONS WITH NON-ACADEMIC AUTHORS
TTI6-i8: ACADEMIC STAFF PARTICIPATING IN PROFESSIONAL BODIES, NETWORKS, ORGANIZATIONS AND BOARDS
TTI6-i9: EXTERNAL ORGANIZATIONS OR INDIVIDUALS PARTICIPATING AT ADVISORY, STEERING, VALIDATION, REVIEW BOARDS TO HEIS, INSTITUTES, CENTRES OR TAUGHT PROGRAMMES
TTI6-i10: PRESTIGIOUS INNOVATION PRIZES AWARDED BY BUSINESS AND PUBLIC SECTOR ASSOCIATIONS OR FUNDING AGENCIES (NATIONAL AND INTERNATIONAL)

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INDICATORS
SOCIAL ENGAGEMENT

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SE Indicators
SE0-i1: PRESENCE OF SE IN THE MISSION OF THE HEI
SE0-i2: PRESENCE OF SE IN THE POLICY AND/OR STRATEGY OF THE HEI
SE0-i3: EXISTENCE OF AN INSTITUTIONAL ACTION PLAN FOR SE IN THE HEI
SE0-i4: BUDGETARY ASSIGNMENT TO SE
SE2-i1: ACADEMICS INVOLVED IN VOLUNTEERING ADVISORY
SE3-i1: EVENTS OPEN TO COMMUNITY/PUBLIC
SE3-i2: RESEARCH INITIATIVES WITH DIRECT IMPACT ON THE COMMUNITY
SE3-i4: COST OF STAFF/STUDENT HOURS MADE AVAILABLE TO DELIVER SERVICES AND FACILITIES TO COMMUNITY
SE3-i5: PEOPLE ATTENDING/USING FACILITIES
SE4-i1: PROJECTS RELATED TO EDUCATIONAL OUTREACH
SE4-i2: ACADEMIC STAFF AND STUDENTS INVOLVED IN EDUCATIONAL OUTREACH ACTIVITY
SE4-i4: BUDGET USED FOR EDUCATIONAL OUTREACH
SE4-i5: COMMUNITY PARTICIPANTS IN EDUCATIONAL OUTREACH ACTIVITY
SE4-i7: ACTIVITIES SPECIFICALLY TARGETING DISADVANTAGED STUDENTS /COMMUNITY GROUPS
SE4-i9: COMMUNITY REPRESENTATIVE ON HE BOARDS OR COMMITTEES
SE4-i11: GRANTS/DONATIONS/CONTRACTS ARISING FROM ENGAGED PARTNERSHIPS

STRATEGIC INDICATORS SET

General	**Institutional commitment to 3M** Acknowledgement in some recognizable form that the institution exists to *serve society*, in its formal Mission or Strategy (1= weak; 5=strong).
Continuing Education	**Presence of CE** Proportion of CE in the total teaching activity (Full Time Equivalent Students; percent).
Technology Transfer	**TTI revenues** Proportion of HEI total turnover derived from research/ development contracts, collaborative projects with non-academic partners, commercial TTI activity, etc. (Euros; percent).
Social Engagement	**Value delivered through social engagement** Average value, per person, of the time donated in delivering services to the external community (Euros per staff and student member, calculated at national minimum hourly wage, or equivalent).

DECISIVE FACTORS

- Institutional policy and governance issues
  - Mission statements and strategy documents
  - Permissiveness and enablement
- The Actors
  - Academic Staff and Students
  - Support staff
- Finance
- Quality
- Effective Communication
- Human Resources
- Issues influencing individual motivation
- Projects and Institutionalisation