



MSCA-DN – TUAI

A QUICK LOOK AT THE PROPOSAL PREPARATION

<https://tuai.eu/>

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AGENDA

- MSCA–DN - Project objectives
- How to find Project Partners (Beneficiaries)
- Cross-sectoral cooperation - Associated Partners
- From a collection of partners to a doctoral network
- Before project starts
- Outside the Project
- Conclusions

(TUIAI)



PROJECT OBJECTIVES

- **to train 13 creative, entrepreneurial, innovative and resilient doctoral candidates (DC), able to face current and future challenges in ML**
- *via* research excellence: (i) training program, (ii) secondments, (iii) network wide training activities
- *via* collaboration with commercial companies to face the real challenges related to ML (Machine Learning in the case of TUIAI) development
- *via* mentoring by primary and auxiliary supervisors and support from industrial advisers



PROJECT OBJECTIVES

- **to raise the attractiveness and excellence of doctoral training in AI in Europe**
- *via* novel education model introduced in the Project: (i) each DC will work on the answer to a research question important for ML development stated for given research area and (ii) will try to confirm the correctness of proposed solution on the example of commercial applications
- *via* verification of scientific hypotheses in a real environment including the industry side
- *via* sharing experience gained in the Project to doctoral schools of university Partners



HOW TO FIND

PROJECT PARTNERS (BENEFICIARIES)

- **Mutual trust and prior acquaintance vs. ad hoc cooperation for a given call**
- Key condition: *an anchor person at each Partner*
 - Researchers known each other before: e.g. from conferences, journal editorial committees, doctoral dissertation reviews, academic exchange
 - similar research interests allows to find synergies from cooperation
- Maximize benefits from scientific cooperation - *one Academic Supervisor = one Doctoral Candidate*
- Next step > *Contacts between scientists turn into contacts between research teams* (via work on application preparation)



ASSOCIATED PARTNERS FOR CROSS-SECTORAL COOPERATION

- **Each partner has a cooperation that can be a strong point of the application** - but in most cases the coordinator does not know about it
- *Key: proven contacts and existing cooperation between the Partner and the Associated Partner*
- instead of secondments to industry (and absorption of DCs) parallel cooperation model for project life-time (practical problems to solve, ongoing contacts and meetings, but no long-time secondments)
- practical industry goals – they may change ?
- rather cooperation area than a given product (for a scientist 3 years is a step-in career development, for industry it is a whole era)



INDUSTRIAL ADVISORY GROUP

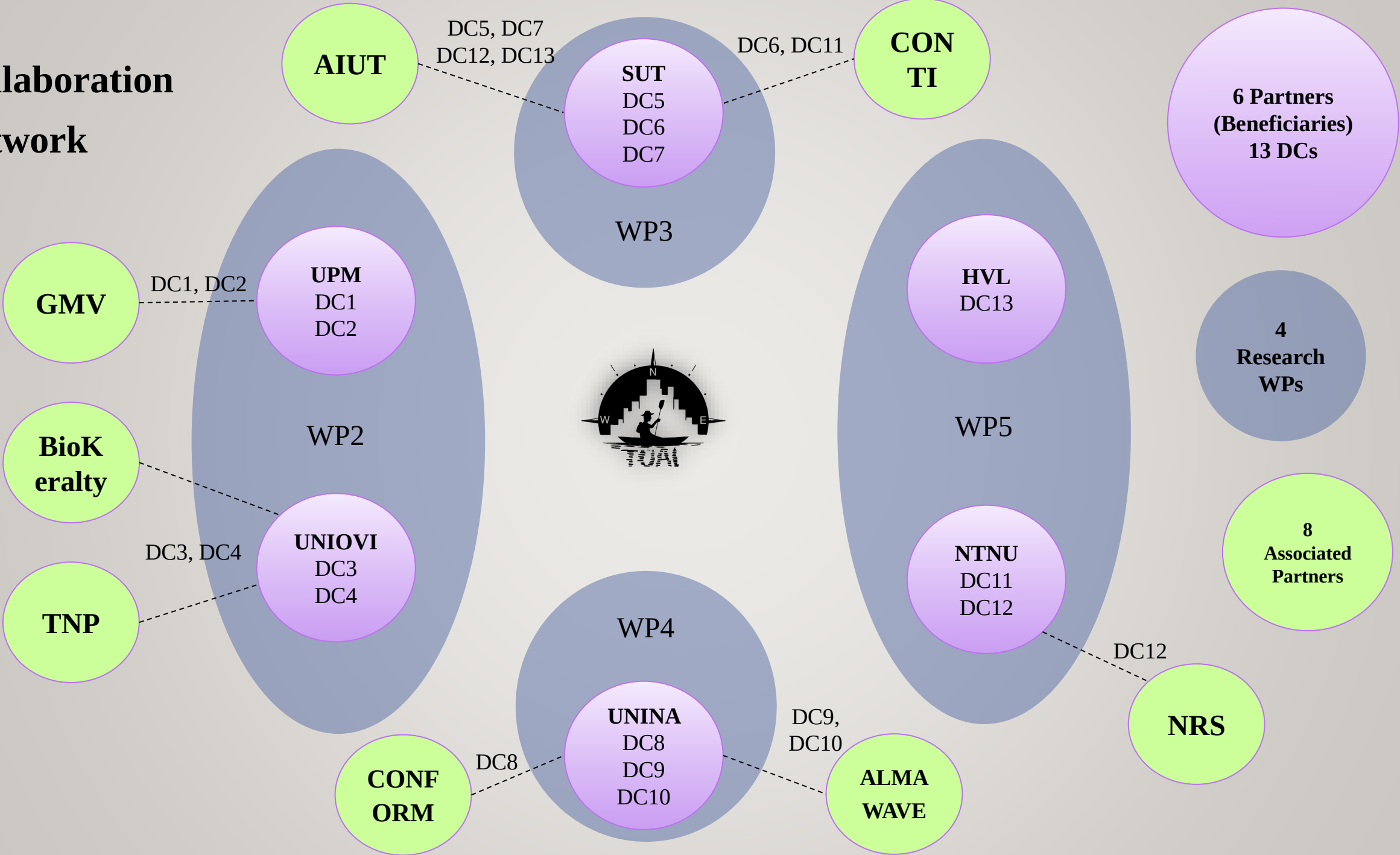
ASSOCIATED PARTNERS

From a cooperation between Partner <> Associate Partner

-> to the cooperation between academia (Beneficiaries) – industry (Associated Partners)

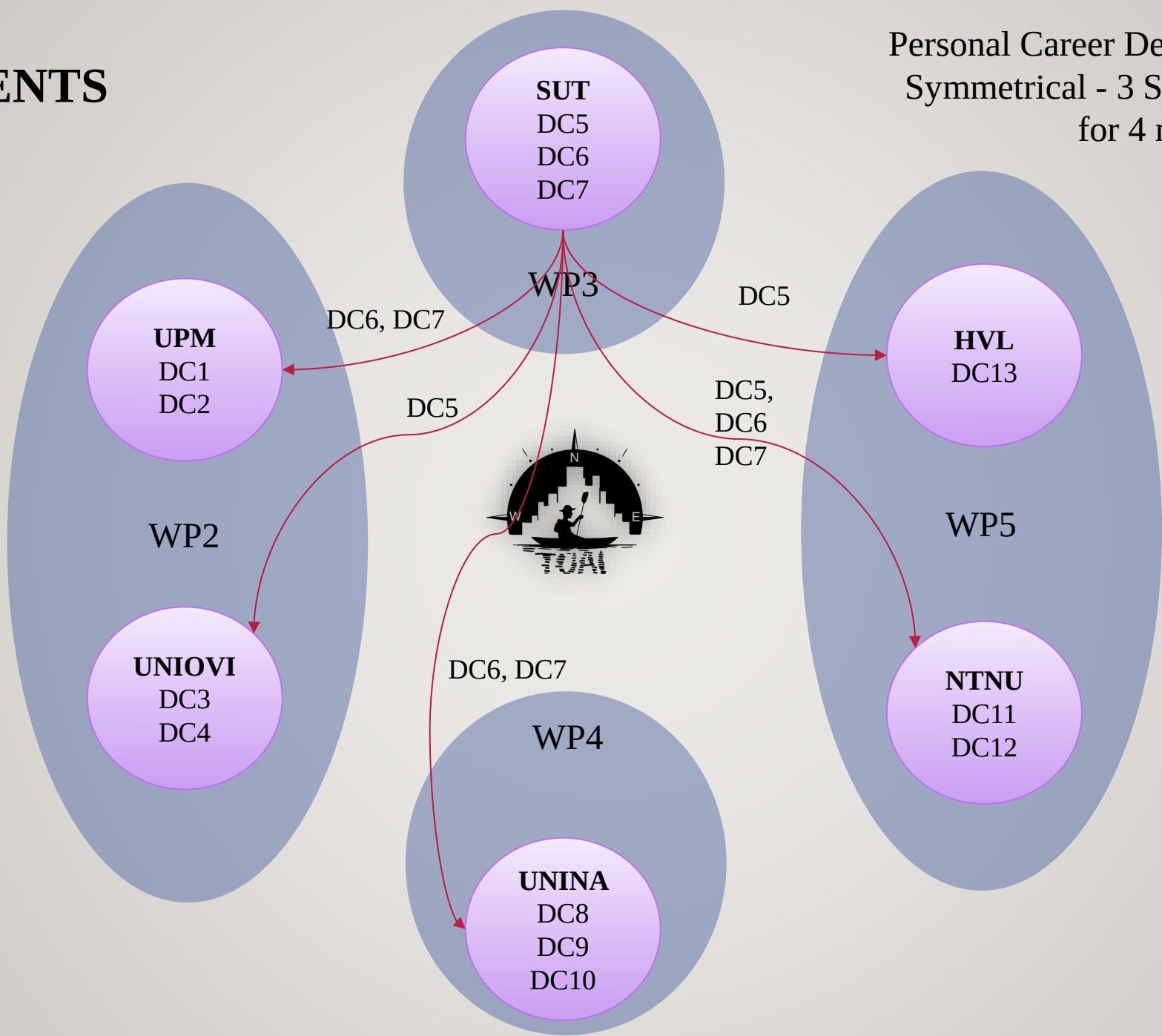
- feedback from R&D departments from the Associated Partners
- support DCs' with their applied research via target projects
- identify any applied research issues that emerge during the Project realization
- advice DCs on their future career development
- prepare recommendations regarding the transfer of scientific results to practical applications

Collaboration Network



SECONDMENTS

Personal Career Development Plans (PCDP)
Symmetrical - 3 Secondments for each DC
for 4 months each





BEFORE PROJECT STARTS

CONSORTIUM AGREEMENT

- **theoretically simple (based on ready to use patterns) and with a small risk, *but in practice***
- different procedures for doctoral studies in different countries
- the contract is verified by the administration, which does not understand that it is not a business deal
- the number of comments on the consortium agreement is inversely proportional to the experience of administration staff
- not everyone uses electronic signatures - the circulation of postal documents significantly lengthens the process of concluding a contract



BEFORE PROJECT STARTS

THE BIGGEST CHALLENGE

- **Ethics Advisor**
 - theoretically not required, but the Ethics Reviewers had different opinion –additional WP „Ethics” had to be added before signing the Consortium Agreement
 - everyone points out the need, but no one can point out good examples
 - it turns out that *necessity is the mother of invention* - we managed to find the right person based on existing scientific contacts



OUTSIDE THE PROJECT

ADVISORY BOARD

Standard networking activities? – yes, but

for project life-time perspective *Advisory Board - must be:*

- Based on existing research cooperation: experienced researchers, specialized in the research areas of the Project
- *Support for DCs*: - maybe future PhD reviewers ?
- Advisory Board members are very welcome for lectures and seminars support
- Project milestones and deliverables – constructive criticism
- Ethic Advisor – an unexpected but very supportive Advisory Board Member



(MY SUBJECTIVE)

CONCLUSIONS

- TUA I wasn't my first MSCA-DN application - definitely 😊
 - *Don't be discouraged if you won't win the first try*
- Negative Evaluation Summary Report ?
 - *what's a pity, but I know my Partners better*
- Resubmission
 - *didn't work in my case.*
 - *the development of science (especially computer science) is very rapid: after one year my former ideas became outdated*
- Final advice: *draw conclusions, and look ahead*



TOWARDS AN UNDERSTANDING OF ARTIFICIAL INTELLIGENCE VIA A TRANSPARENT, OPEN AND EXPLAINABLE PERSPECTIVE

THANK YOU FOR YOUR ATTENTION

QUESTIONS ARE VERY WELCOME

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