Responses to the IPN's "**Vijfpuntenplan**"

by the **ICT Next Generation (ICTng)**

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1. **Het tekort aan Digital Scientists wordt ingelopen door een Onderwijsplan over de hele keten.**

The ICT Next Generation (ICTng) notices several academic teaching paradoxes. On one hand, universities advocate for more ICT training. On the other hand, as the student numbers rise, an alarm is raised that universities have insufficient capacity to handle the influx, leading to discussions about implementations of a potential numerus-clausus. Rather than supporting the numerus-clausus, ICTng in principle is willing to face the challenges caused by increasing student numbers, which require new, creative solutions that also may drive the ICT field itself. At the same time, realizing excellent education needs substantial effort, which currently is undervalued career-wise in comparison to academic excellence. If excellence is to be reached both in research and education, this paradox should be addressed too.

2. **Een nationaal plan ICT-Digital Science zorgt voor interdisciplinaire data-science met alle disciplines.**

ICTng aims to stimulate far-reaching inter-field ICT collaborations, including non-obvious ones (e.g. between low-power wireless transceiver design and human-computer interaction). However, realizing true interdisciplinarity requires more bridging effort than simply putting disciplines together, and this is not always incentivized. By establishing a community of **all** future-generation ICT scientists from **all** Dutch universities, ICTng is the only platform to effectively and naturally catalyze collaborations over the full breadth of the ICT spectrum. Through its members, ICTng also will create a strong combined network of public-private connections and connections across scientific disciplinary borders.

3. **Een nationaal plan ICT-kernonderzoek versnelt de kennisontwikkeling voor Nederland.**

We, as ICTng, believe that this indeed is a good idea. However, the development of the plan needs involvement of **all** stakeholders, especially young ICT faculty who will be the driving force behind all future research projects beyond 2020. The fact that the majority of newly hired ICT scientists at the Assistant Professor and above level are non-Dutch, also requires considering a broader international context of the plan, which we feel is still lacking.

4. **Daartoe wordt het budget van 25M bij NWO verdubbeld en de staf voor onderwijs vergroot.**

Attracting and retaining talented young ICT researchers is a major challenge, yet essential for both realizing excellent research and education. While welcoming increased funding, ICTng wants to emphasize that new tenured positions cannot be funded through research programs, and given current task portfolios and proposal success rates, it is unrealistic to expect that scientists bring in all money of their own. More basic funding is needed to give the next generation room to develop themselves and their own research programs.

5. **Daartoe wordt ICT-Science een passende plaats in de wetenschapsbeoordeling toebedeeld.**

Regarding the assignment of research funds in The Netherlands, ICT seems to receive less attention than other research domains. This is because ICT in general is seen as an enabler rather than a science. The ICTng members will combine forces to a make a clear vision plan for ICT science and give ICT the visibility and acknowledgement it deserves—also as a fundamental science, without which any other research breakthroughs would not be possible, which has already greatly impacted both economy and society, and which has become increasingly indispensable in all aspects of our daily lives.