

› **MISSION GOVERNANCE: CRUCIAL
TO THE FUTURE SUCCESS OF
MISSIONS, BUT LARGELY IGNORED
IN THE CURRENT DEBATE**

TNO innovation
for life

EU-SPRI Annual Conference, 6-8 June 2018 |

TRACK 2 - SOCIETAL CHALLENGES & IMPLICATIONS FOR STI POLICY

Session 25 Thursday 7 June, 16:30-18:00h

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THREE KEY QUESTIONS

- › 1) Why is governance, currently a largely forgotten element in the current MOP debate, vital to mission success?
- › 2) How can the governance of missions best be designed and structured?
- › 3) Where can mission governance go wrong? Potential pitfalls

BUILDING ON:

- › **Two studies for the European Commission, DG RTD (JIIP, published May 2018)**
 - › Global inventory of mission initiatives
 - › Assessing the impact of an MO R&I approach
- › **Book publication ‘De Staat van Nederland Innovatieland 2018’ – special issue on mission-oriented policy (autumn 2018)**



NEW MISSION-ORIENTED POLICY - CORE ELEMENTS

- › Ambitious, bold and inspirational
- › Clear direction, well-defined timeframe
- › Broad societal relevance / societal challenges-oriented
 - › complex and wicked / cross-linkages / feedback loops
- › Cross-disciplinary and multi-actor in nature
- › Stakeholder but also citizen involvement
- › Openness, transparency and accountability
- › R&I-specific: experimentation and self-discovery

TWO TYPES OF MISSIONS

Transformer mission

**Focused on 'transformative'
change**

**Extensive transition and/or
system change, with technology
and innovation core**

Accelerator mission

**Focused on accelerating
technological development and
ground-breaking application**

**Bold and ambitious technology
and/or innovation goal**

GOVERNANCE OF MO-POLICY AND MISSIONS

- › Key question:
 - › “How can missions best be chosen, designed, and implemented?”
- › Two angles:
 - › **Deductive** (theoretical insights)
 - › **Inductive** (empirical inventory)

HOW TO UNDERSTAND MISSION GOVERNANCE?

- › Several notions of governance stand out when dealing with missions:
 - › Public governance
 - › Participatory governance
 - › Global governance
 - › Multilevel governance
 - › Collaborative governance
 - › Private governance
- › Mission governance is highly context- and goal-specific, and depends on the type of mission (accelerator / transformer) and its degree of ‘granularity’ (how missions are delineated and relate to each other) → no “one size fits all”
- › ‘broader’ missions and R&I missions have different governance requirements
- › **What are organising principles / ‘rules of thumb’ for mission governance?**

ORGANISING PRINCIPLES: MISSION GOVERNANCE (1)

› Which aspects matter for governance?

- › Adaptability and flexibility (vis-à-vis goal achievement)
- › Citizen involvement / engagement
- › Challenger involvement (startups, social entrepreneurs)
- › Avoiding capture and rent-seeking
- › Multi-level and cross-sector (→ complex policy coordination)
- › Space for experimentation and ‘self-discovery’
- › Type of policy instruments and policy mix
- › Monitoring and evaluation
- › Accountable...

ORGANISING PRINCIPLES: MISSION GOVERNANCE (2)

- › What stands out: multi-dimensional logic of MOP ...
- › How to deal with managing (hyper)complexity, in a multi-level, multi-actor context?

- › Building on theoretical perspectives / notions
- › Building on empirics: past and ongoing mission successes

- › What role for politics, for public administration?
- › What role for citizens and how to facilitate?
- › What role for private actors? (entrepreneurs, social innovators)

...WHERE CAN MISSION GOVERNANCE GO WRONG?

- › Capture, especially in selection/slicing up phase
- › Too little lasting commitment

- › Ill-designed governance
 - › Organisational
 - › Multilevel
- › Governance structure not in tune with chosen instruments

- › Bad management

ORGANISING PRINCIPLES: MISSION GOVERNANCE (3)

- › Making a distinction between the “what” and the “how”, i.e. between:
 - › **Selecting and formulating missions**: prioritizing, ‘slicing up’, choosing
 - › **Implementing missions**: making the mission work, goal achievement, monitoring and evaluating, adapting over time
- › **Selecting and formulating missions**: as outcome of a political process, but with involvement of the public administration and with broad and active citizen participation
- › **Implementing missions**: organizational design with political arena put at a distance (though with some degree of ultimate control). Stakeholder and citizen involvement in co-creation.

ORGANISING PRINCIPLES: MISSION SELECTION

- › **Stepwise approach to formulating and selecting missions**
 - › Prioritizing
 - › At level of societal challenges: what goals and when? (politics)
 - › ‘Slicing up’
 - › Making missions concrete: translating societal challenges into missions (politics / citizens)
 - › Possible way: to offer rough preliminary sketches of possible mission alternatives (drawn up by politics / public administration), subsequently presented to citizens for co-creation. Possibly alternative missions modules, together with mission instruments.
 - › Choosing missions via some form of co-decision (politics and citizens)

ORGANISING PRINCIPLES: MISSION SELECTION

- › Notion of **missions as a set of related, but self-contained initiatives** with own goals - from broad, encompassing ones at the top (the all-encompassing challenge) and intermediate and more specific ones at lower levels
- › Missions as a set of **nested modules**: ‘matryoshka’ or ‘nested doll’ principle
- › **Modularity as approach** (ESIR 2018) – module defined as a quasi-autonomous subsystem – a *programme* - which contributes to a more complicated process/goal (mission) by being combined with other subsystems (programmes) through certain *connective rules*
- › **Governance** based on a modular approach can accommodate for a variety of (competing) programmes, experimental, high risk, based on ‘trial and error’



ORGANISING PRINCIPLES: MODULARITY

- › **Modularity governance (ESIR, 2018)**
 - › **Hierarchical decomposition** - a grand architect pre-setting all rules
 - › To be used in restricted technological ‘accelerator’ missions
 - › **Information assimilation** - architect in the lead, but adaptable, avoiding inflexible system features
 - › To be used in pervasive ‘accelerator’ or broader ‘transformer’ missions
 - › **Evolutionary connection** – multiple architects and multiple agents engaged in design of programmes, with continuous assimilation of new information
 - › To be used in missions of very large operational scope, with strong cross-domain synergies and multi-level government (EU, MS, regions)

ORGANISING PRINCIPLES: MISSION IMPLEMENTATION

- › *“Missions need mission-oriented organisations” (ESIR: 22)*
 - › in charge of a co-design of the mission implementation process;
 - › in charge of the achievements of the mission and accountable
 - › endowed with a relevant degree of freedom, be able to manage in a dynamic way the mission portfolio
- › Missions need ‘missionaries’ to champion and drive the mission:
 - › *“a senior individual of high standing and demonstrated independence with the remit to create a platform and orchestrate European action across DGs, Member States and regions and to liaise between R&D performers, regulators, users and sectoral stakeholders” (Aho group; RISE 2018)*

ORGANISING PRINCIPLES: MISSION IMPLEMENTATION

- › *“Missions need mission-oriented organisations”*
 - › Does this require a separate agency?
 - › New / existing one taking on mission tasks ?
 - › How to arrange political control at a distance?
 - › Who is accountable and for which parts?
 - › How to arrange for adaptability and flexibility?
 - › Who is in charge of monitoring and evaluation?
- › Missions need ‘missionaries’ to champion and drive the mission
 - › Who?
 - › How much freedom of operation (see above)?

ORGANISING PRINCIPLES: MISSION IMPLEMENTATION

- › **Setting the rules of the game / engagement**
 - › Design of governance structure / organisational set-up
 - › Not in isolation, but closely tuned to choice of policy instruments / mix
- › **Who?**
 - › Joint task for political arena, public administration, and, when identified/established, the mission-oriented organisation itself

ORGANISING PRINCIPLES: MULTI-LEVEL GOVERNANCE

- › **Complex policy coordination**
 - › EU - Member States
 - › federal state - states/Länder (Germany, US)
 - › Member States – regions
- › **Are ‘soft’ rules of engagement sufficient?**
- › **Who is in the lead – subsidiarity & EU added value principles apply**

USE OF EMPIRICS IN GOVERNANCE DESIGN

- › Analysing and learning from governance of successful and failed missions
- › What are governance strengths and weaknesses of past and ongoing missions?

Results of the global inventory of MO-initiatives show:

- › There is no single governance model (no “one size fits all”)
- › Four governance models appear to be most common:
 - › governance by several ministries and subject to **cross-governmental coordination**
 - › governance and coordination by a **single** ministry, agency, or local government body
 - › governance and coordination by a **body created specifically for the mission**
 - › governance and coordination by a **public-private partnership**

USE OF EMPIRICS IN GOVERNANCE DESIGN

- › Citizens are often left out in implementation and design or reduced to inclusion of end-users/consumers or representative organisations
- › Need for new forms of governance to ensure vertical and horizontal coordination of stakeholders and do away with any existing silos (both in terms of governing institutions and policy instruments): need for joint governance
- › Learning from successful private mission governance (e.g. Gates Foundation, SpaceX, Hyperloop)

DELTA PROGRAMME (2010-2050)

- › **Goals:** make The Netherlands resilient to climate change and sea-level rise and ensure a sufficient supply of fresh water, connecting water safety / freshwater availability and spatial planning
- › **Selection:** State Committee installed by Minister of Public Works in 2007; advised on aims, scope and conditions in 2008
- › **Implementation** (under second Delta Law)
 - › Independent Delta Commissioner, chairs multi-level multi-stakeholder steering group
 - › Modular governance: 9 sub-programmes with specific goals, governance boards and instruments
 - › Policy mix: public procurement, innovation programme, cross-project explorative studies, stimulation programme
 - › Systematic progress monitoring and evaluation system (MWH; measuring, knowing, acting), including early signals
- › **Citizen engagement** through engagement by design:
 - › Participative process with (regional) meetings on sub-program level, collecting ideas and opinions for sub-programs

DELTA PROGRAMME (2010-2050)

› Strengths and weaknesses

- › Independent Commissioner reduced short-term politics cycle and Delta Fund secures long-term funding
- › Multi-annual perspective (12 years) provides certainty to stakeholders including industry
- › Time consuming translation of national water plan into regional and local water plans and regulation, but ensured embeddedness and commitment on all levels

CONCLUSIONS

- › **New designs and forms of governance** are needed to ensure vertical and horizontal coordination of all stakeholders, not only to select missions, but also to successfully implement missions
- › **Active citizen participation** is required in selecting missions and their implementation, not only to prevent capture, but also to ensure their buy-in, commitment and contribution to the mission
- › Lessons from the current and historic cases show that likelihood of success can be increased when mission can build upon **strong and wide public support, existing expertise and knowledge and embedding in existing scientific and innovation systems**, but also that multi-level and multi-actor governance structures take time

› **THANK YOU!**

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