

***Current Approaches to STI  
Policy Making in the  
Context of SDGs***

**2<sup>nd</sup> session**

**Science, Technology and  
Innovation (STI) Policy  
Instruments:  
Implementation Challenges**

**Ludovico Alcorta  
Professorial Fellow on Technology,  
Innovation and Sustainable  
Development  
UNU MERIT  
alcorta@merit.unu.edu**

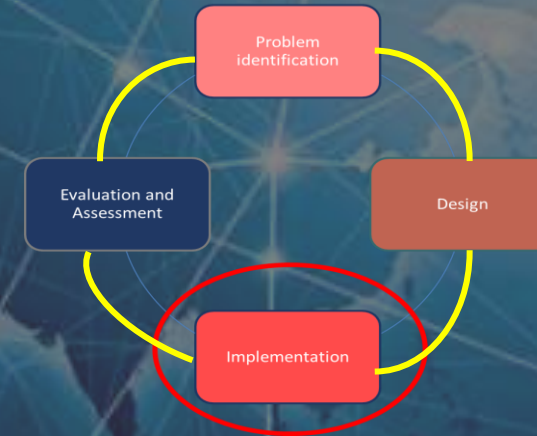


UNITED NATIONS  
UNIVERSITY

UNU-MERIT

# What is STI policy Implementation?

- Implementation is the stage of STI policy cycle where policy instruments are executed or operationalized



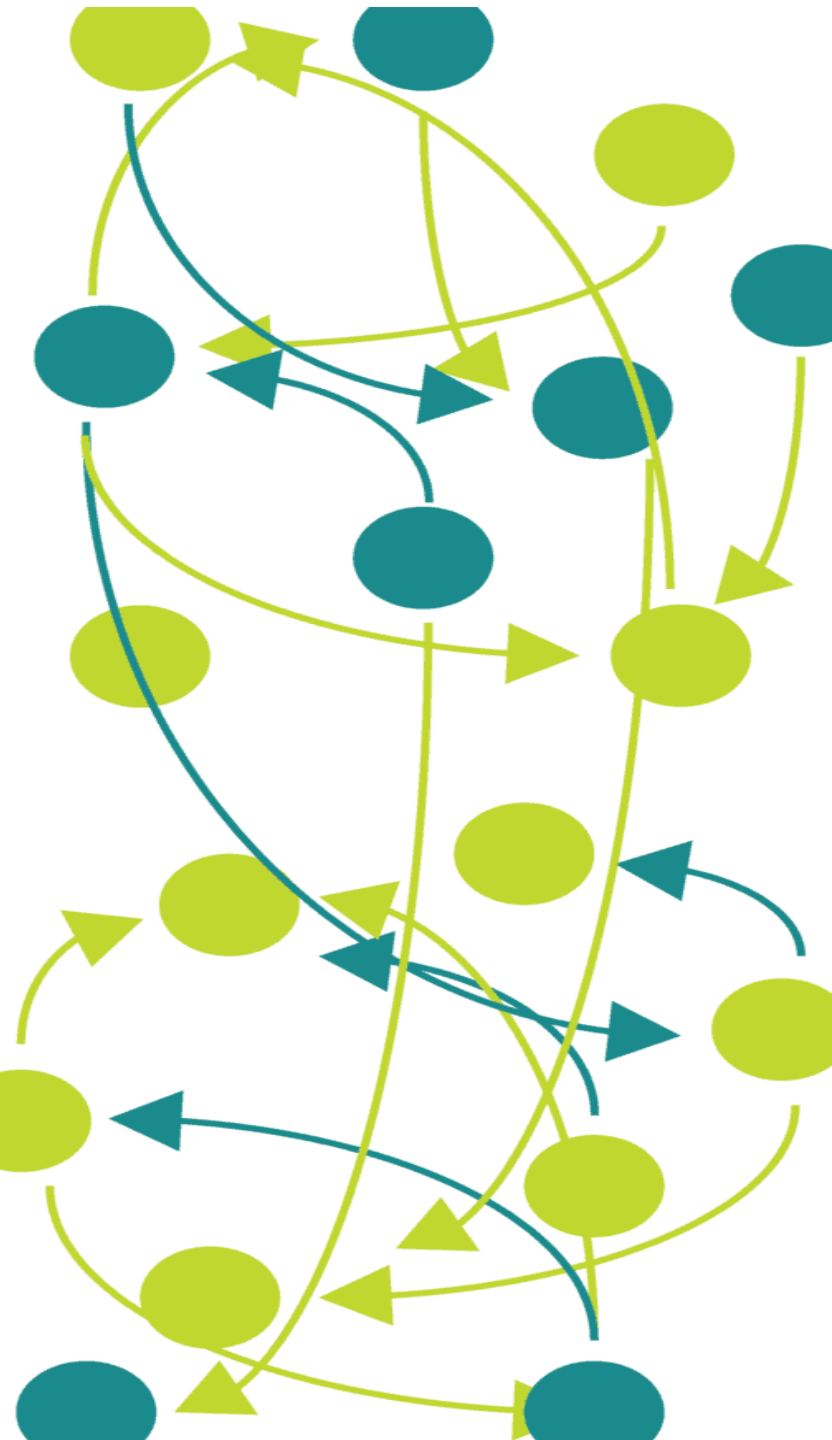
- Characteristics of the Implementation Stage
  - Proof of concept and learning
  - Social and Political
  - Change process
  - Managerial

# IMPLEMENTATION CHALLENGES: PLANNING



- ❑ STI Roadmap: list all the necessary long, middle, short term and operational actions
- ❑ Set:
  - Calendars
  - Roles and responsibilities
  - Targets and performance indicators
  - Costing





# IMPLEMENTATION CHALLENGES: SYSTEMS APPROACH



- ❑ Assess the current social, economic, and political (SEP) environment and how to adapt to it
- ❑ Identify:
  - Inputs and outputs
  - Key STI actors
  - SEP relations between key STI actors
  - SEP effects and repercussions
- ❑ Examine and assess the interactions of all the above aspects of the STI system

# IMPLEMENTATION CHALLENGES: LEADERSHIP AND COMMITMENT

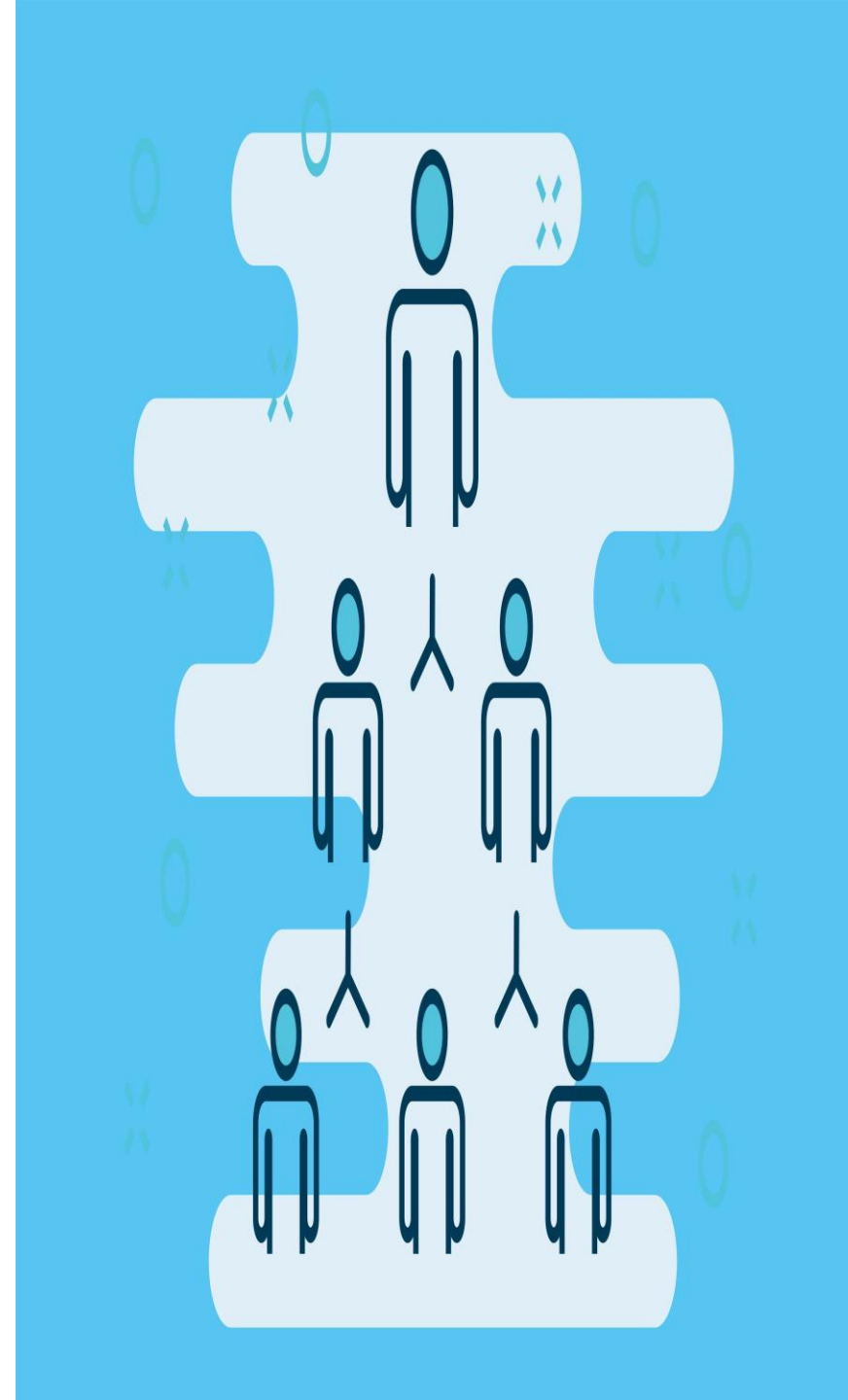


- Ensure
  - Top Presidential or parliamentary priority
  - Top Ministerial priority
  - Champions
- Draw on STI bureaucracy
  - Influence and advocate
  - Create leadership and commitment
- Build on committed personnel



# IMPLEMENTATION CHALLENGES: GOVERNANCE

- ❑ Introduce an overall representative STI multi-stakeholder consulting/decision making instance
- ❑ Establish:
  - A body with the overall responsibility for implementation
  - The subordinate duties, structures and joint tasks
  - Intra and interorganizational teams
  - Clear accountabilities
- ❑ Transparency:
  - Full information
  - Clear and accessible processes and related rules



# IMPLEMENTATION CHALLENGES: COORDINATION



- ❑ Achieving successful STI policy implementation often depends significantly on non-STI actors or actions, which all need
- ❑ Create
  - Multi-stakeholders implementation committees, working groups and teams
  - Selection mechanisms that ensure relevant organizations are involved
  - Rotating managerial responsibilities
  - Focal points across implementation agents
- ❑ Follow-up on the tasks and ensure they are delivered as expected and in time



# IMPLEMENTATION CHALLENGES: TRADITIONAL AND SOCIAL MEDIA AND INTERNET

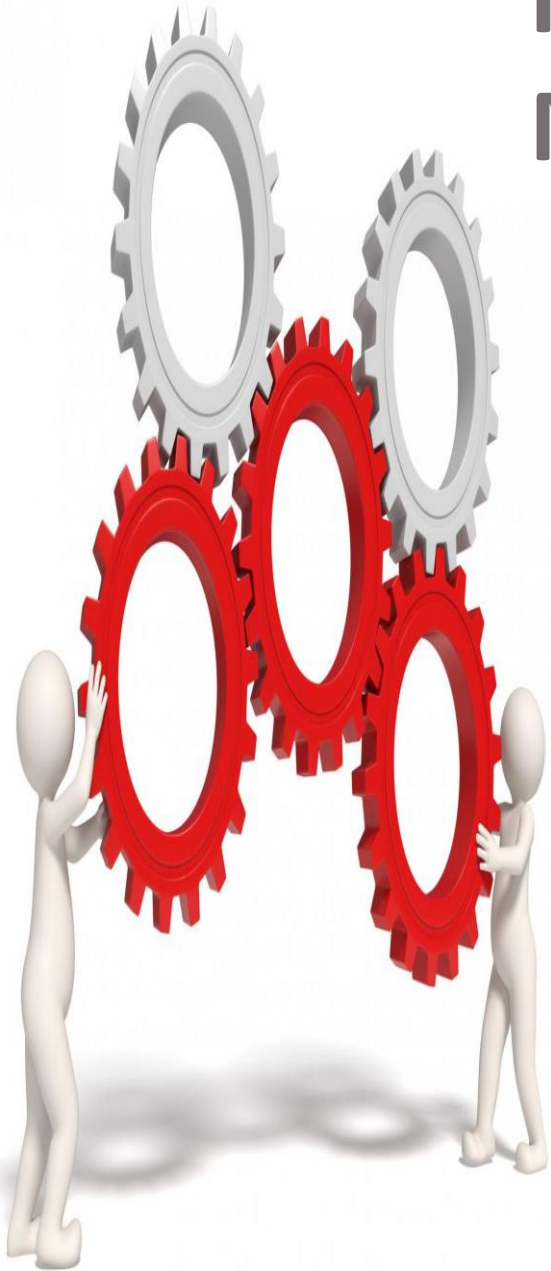


- Identify media outlets that are used by the STI communities to disseminate information
- Begin a press and social media campaign
- Use internet platforms, facebook, tweeter, webpages and any available e-facilities to facilitate the involvement of stakeholders
- Ensure that information provided is easy to understand, useful and comprehensive





# IMPLEMENTATION CHALLENGES: MANAGERIAL CAPABILITIES



- ❑ Entrust STI managers with driving the implementation stage of the policy process
- ❑ Introduce the required managerial capabilities:
  - Technical expertise
  - Holistic thinking
  - Problem solving
  - Social networks
  - Communicating
  - Influencing and convincing
  - Trustworthy and respect
  - Risk-taking
- ❑ Have available adequate implementation mechanisms: executive orders, administrative mechanisms, rules and regulations



# IMPLEMENTATION CHALLENGES: RESOURCES



- ❑ Ensure the necessary level of financial resources:
  - Consultants, studies, interviews, travel, meetings, software, communications, press, social media
- ❑ Obtain the right amount and mix of human resources
  - Managers
  - Experts
  - Support staff
  - Communications professionals
- ❑ Access to the required knowledge
  - Epistemic community
  - Policy Research
  - International Experiences
  - Consultancy companies/international organizations

## FINAL REMARKS



- ❑ The extent of the implementation challenge depends on the degree of institutional sophistication in a particular country, although even the most advanced countries face implementation challenges
- ❑ The more elaborate an instrument is the more complex the implementation process needs to be. Conversely, for instruments that are less sophisticated and have less impact, a more straightforward approach can be taken.
- ❑ During implementation stage complexities are more in the social, political and managerial processes than in the technicalities of the instruments
- ❑ Implementation processes need time. Do not ‘cut corners’ or reduce the length of time processes demand for political expediency



*Many Thanks*

**Ludovico Alcorta**

Professorial Fellow on Technology, Innovation and  
Sustainable Development

UNU MERIT

[alcorta@merit.unu.edu](mailto:alcorta@merit.unu.edu)