



GHG Registry Development: Overview of project Planning and Costs

GUILLAUME JACQUIER
CITEPA

PARTNERSHIP FOR MARKET READINESS
3RD REGIONAL MRV TECHNICAL TRAINING
IZMIR, TURKEY
SEPTEMBER 17 – 19, 2014

1. Objectives and possible uses of a registry

2. Registry development

- Requirements : create your own system
- Specifications : a R vs. R balance
- Technical and IT elements to consider
- Quality control checks : a 3-level pyramid

3. Costs

1. Objectives and possible uses

What use(s) for a registry?

Carbon Reporting Registry

A set of individual data

Carbon Asset Registry

A set of accounts

◆ Carbon pricing mechanisms

- carbon tax
- track mitigation actions

- carbon assets management

◆ Inventory improvement

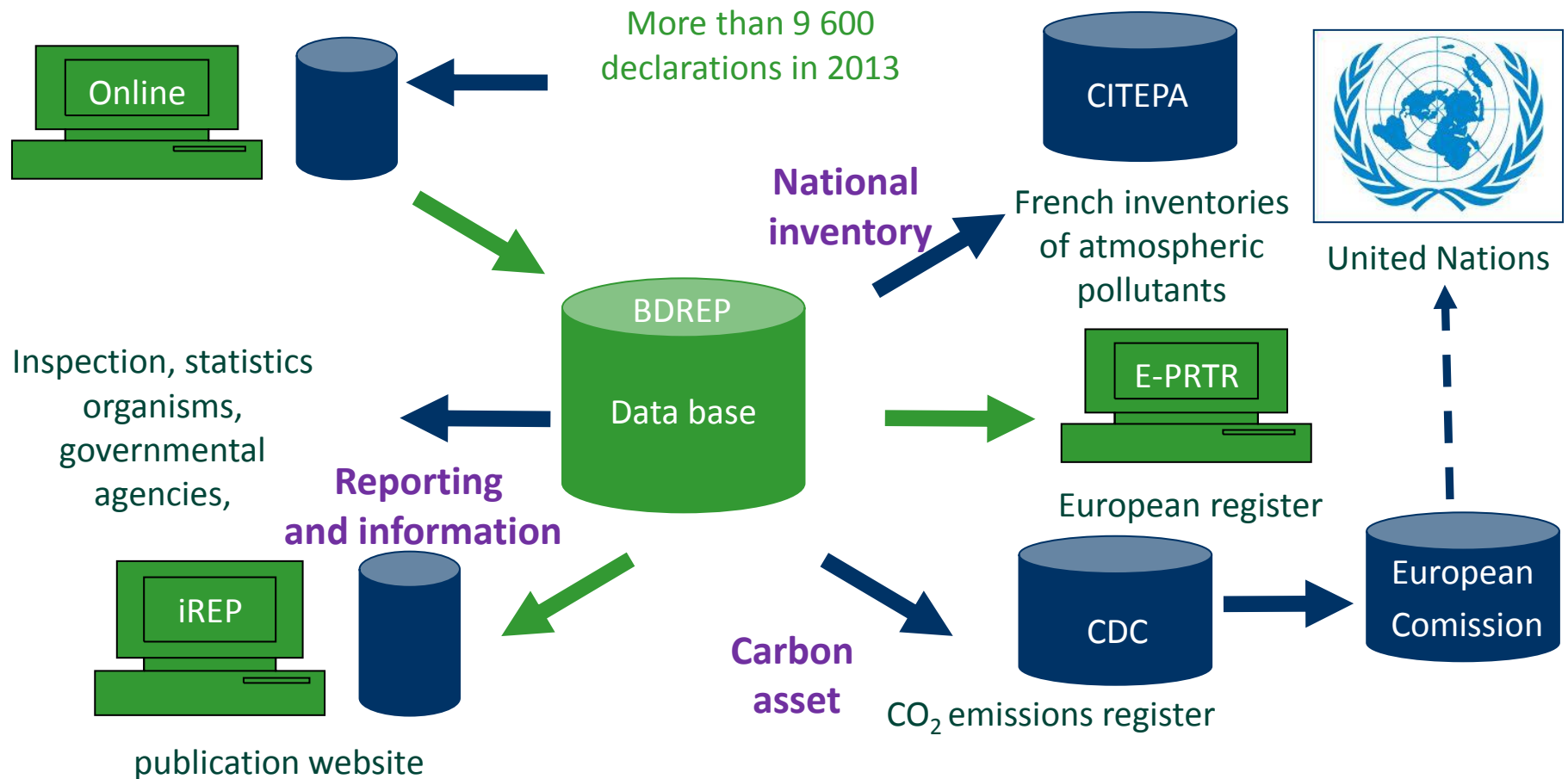
- activity data for specific sector
- emissions

◆ Regulation support

- data monitoring
- compliance checks
- verification support

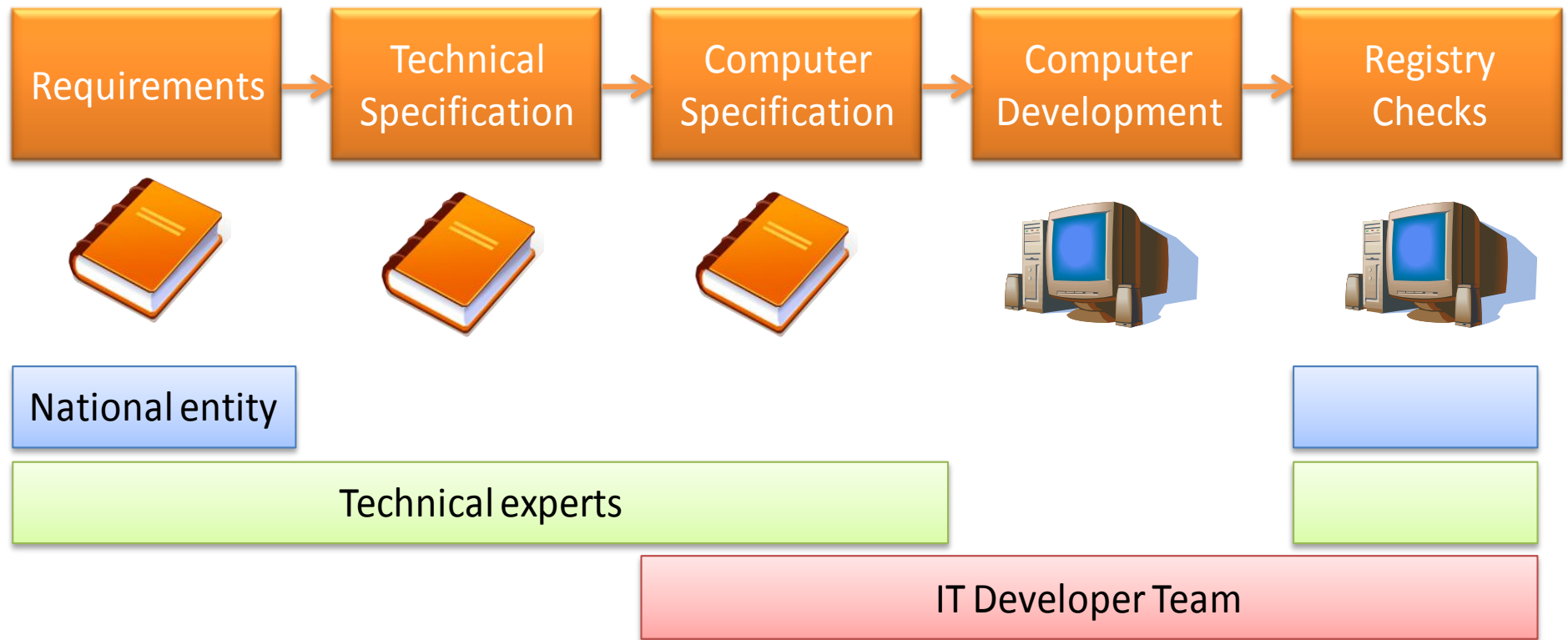
◆ Public information

The various uses of the French register

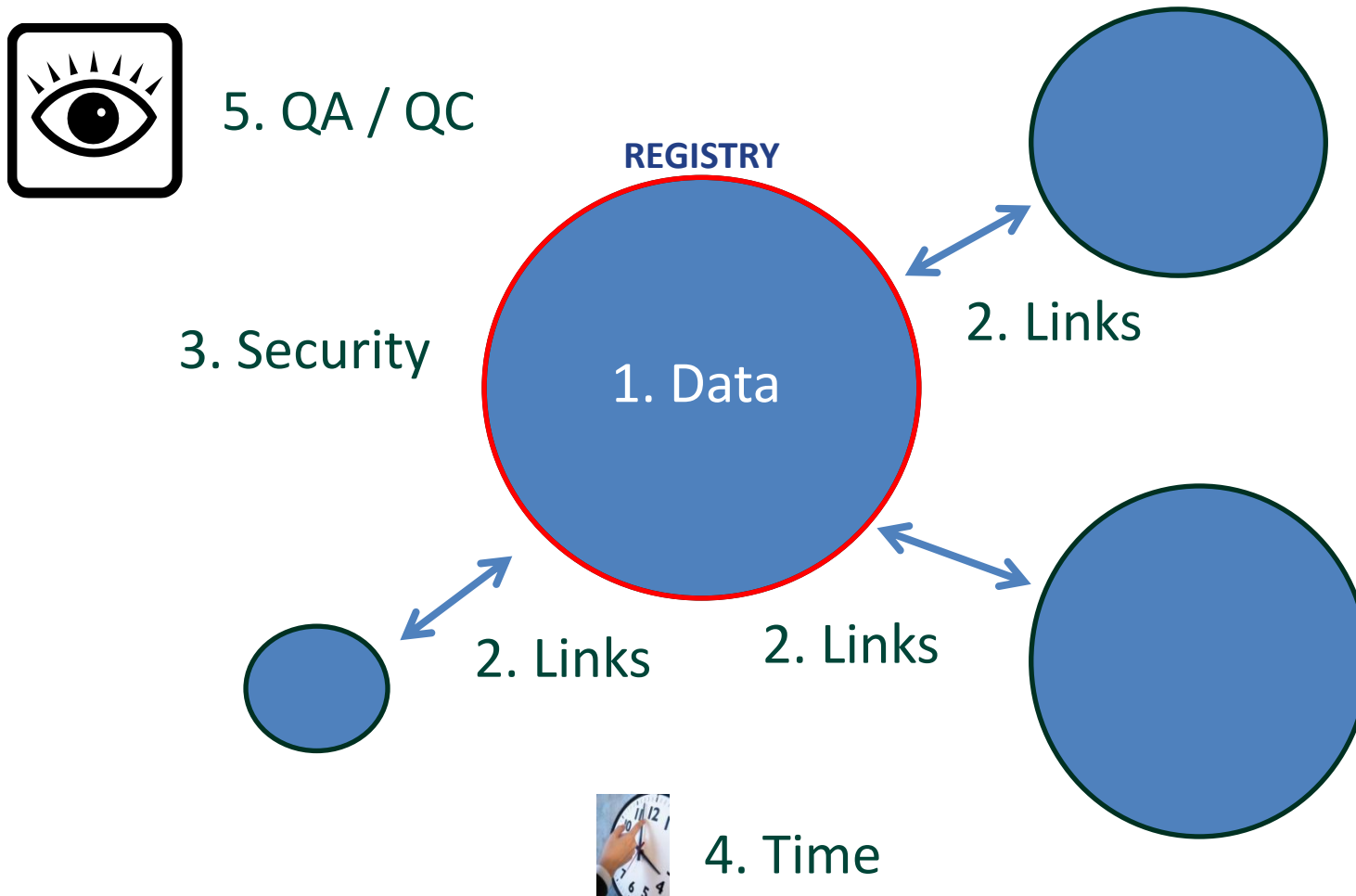


2. Registry development

Major steps to build a reporting registry

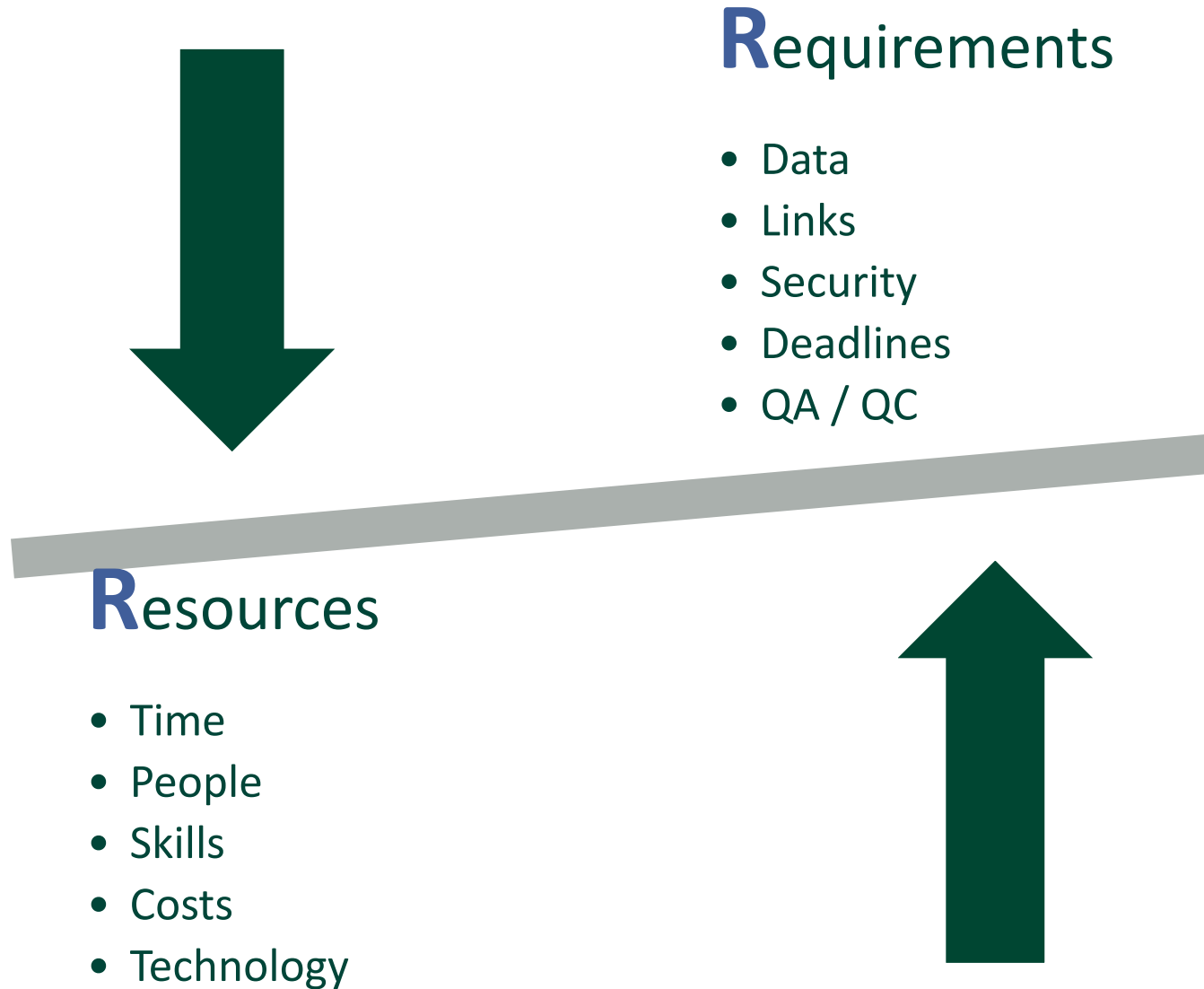


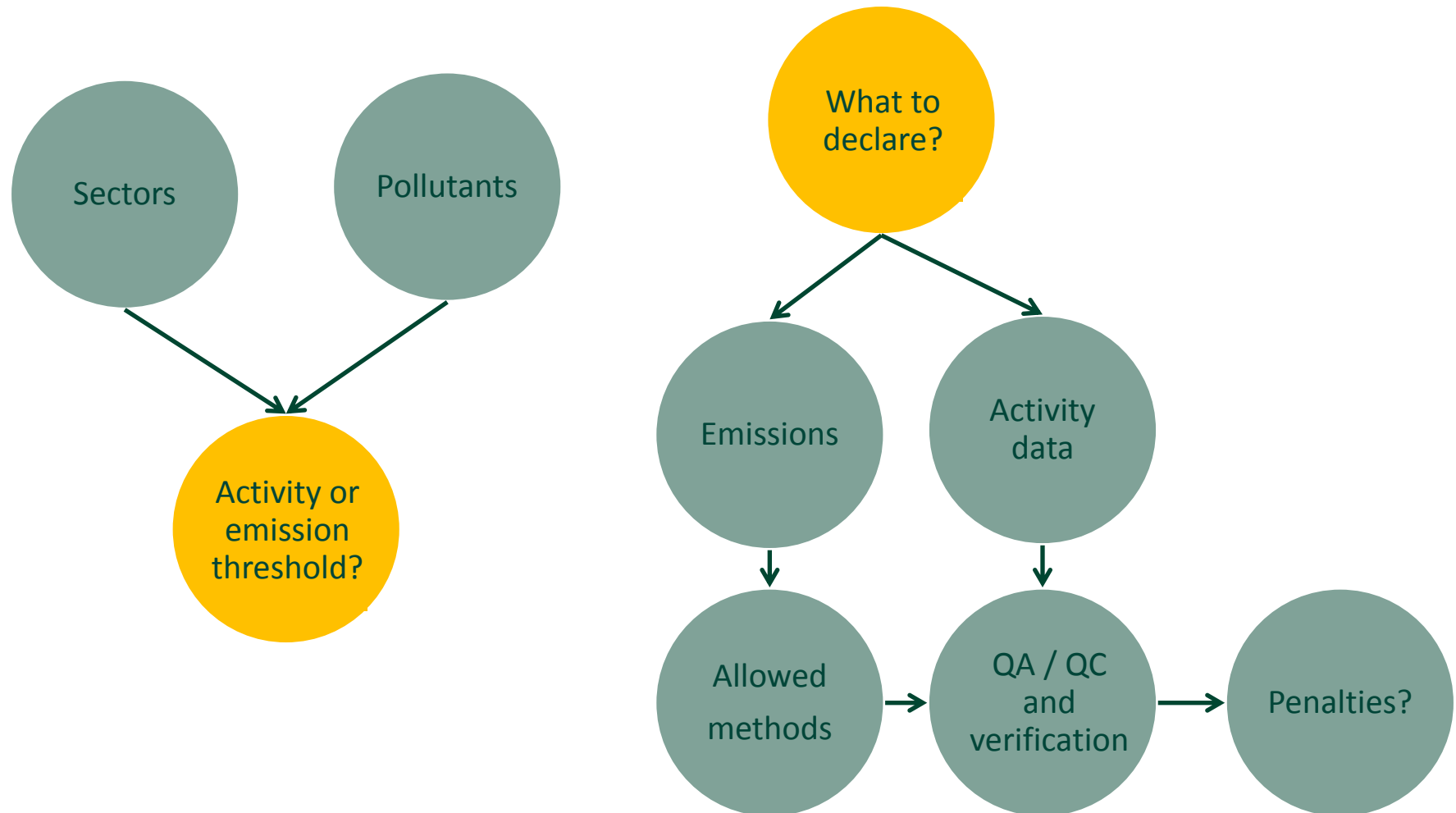
These major steps apply whatever are the final purpose and scope of the registry.



From objectives and considered uses define requirements on

- ◆ Data type, quantity, and quality
- ◆ Links and consistency with existing programs
- ◆ Security, confidentiality, access control
- ◆ Deadlines and timetables
- ◆ QA/QC and verification





NO

Voluntary reporting

It is recommended to create working groups with the program participants, to develop relationships and encourage them to respond



Implementation of appropriate institutional system is faster and easier



Risk of non-response, or incomplete or inaccurate reporting

Poor reliability

YES

Establish an institutional system and regulations according to the defined objective



Data collected is precisely defined
Better accuracy and reliability



Institutional system and regulations to develop

- ◆ Paper
- ◆ Electronic (e.g. Jordan)
- ◆ Online (e.g. GEREPE)

Key elements to consider:

number of participants, IT capabilities, link/consistency with existing systems, tracking of participant's MRV operations, QA/QC requirements, needs in data analysis, security requirements, resources (time, costs, skills, people)



A tight collaboration is necessary between technical experts and IT developer teams to write computer specifications and avoid further troubles and bugs during checks.

◆ Structure

Network, software, hardware

◆ Security

Password, encryption, account management, confirmation of changes/transfer, independent transaction log, time window for reporting/transactions, automated quality checks?

◆ Interface

Integrated reporting system or manual input, single or multiple form filling process, reminders about deadlines and requirements?

◆ **Level 1 : Built-in**

Automated checks to display outliers

◆ **Level 2 : Local**

Validation of individual data by competent authorities familiar with local context

◆ **Level 3 : National**

Consistency between years, major trends

3. Costs

- ◆ Cost-effective registry handle **integrated information** (air pollutants + GHG) and can be used **for different purposes** (see next slide)
- ◆ Tight collaboration between technical and IT experts is essential to costs optimization from the start, and allow to avoid heavy costs later on
- ◆ Registry has to be designed in a way it can be easily updated by non IT providers

The next slide gives **an idea** of the cost of a “**national integrated reporting registry**” meaning to meet different purposes as it is the case in France’s example :

- Inventory improvement
- Feeding a carbon market registry
- Statistics and information needs
- Regulations compliance checks

Overall cost will mainly depends upon:

- Existing tools and registry, or is it to be developed from scratch?
- Is it a federation of States, each State having their own registry? (eg Mexico); Or is there only one centralized registry (eg France)

- ◆ Diagnosis (30-50 k€)
 - In every case a preliminary diagnosis of the existing information system and inventory is necessary to get a more accurate development cost

- ◆ Optimization or creation?
 - 75 k€ to 100 k€ for some important changes on an existing registry (IT provider)
 - 200-500 k€ to build a brand new registry (IT provider)

- ◆ IT up-dating
 - 50 -75 k€ is the cost for yearly routine modifications (IT provider)

- ◆ Administrative up-dating and checks
 - 2-3 days/month from national administration in charge of the registry

- ◆ Implementation of an MRV registry
 - 155-245 k€ to design and implement an integrated MRV system around and including the registry (excluding computer development) by inventory expert team. This does not really depend on the fact there is already a registry or not.

Rough estimate of total costs

Starting from scratch

Year 1

385 k€ - 795 k€

depending on number of sectoral analysis and complexity

Year N+1

100-135 k€

assuming external expert help on year 2

Optimizing an existing reporting registry

Year 1

260-395 k€

Year N+1

50-75 k€

assuming external expert is not needed any more because of initial capacity building

Thank You

CITEPA

GUILLAUME.JACQUIER@CITEPA.ORG

FOR MORE INFORMATION ON THE PARTNERSHIP FOR MARKET READINESS

PLEASE CONTACT:

PMR SECRETARIAT

PMRSECRETARIAT@WORLDBANK.ORG

WWW.THEPMR.ORG
