



# A Quality Assurance Framework for D-M processes

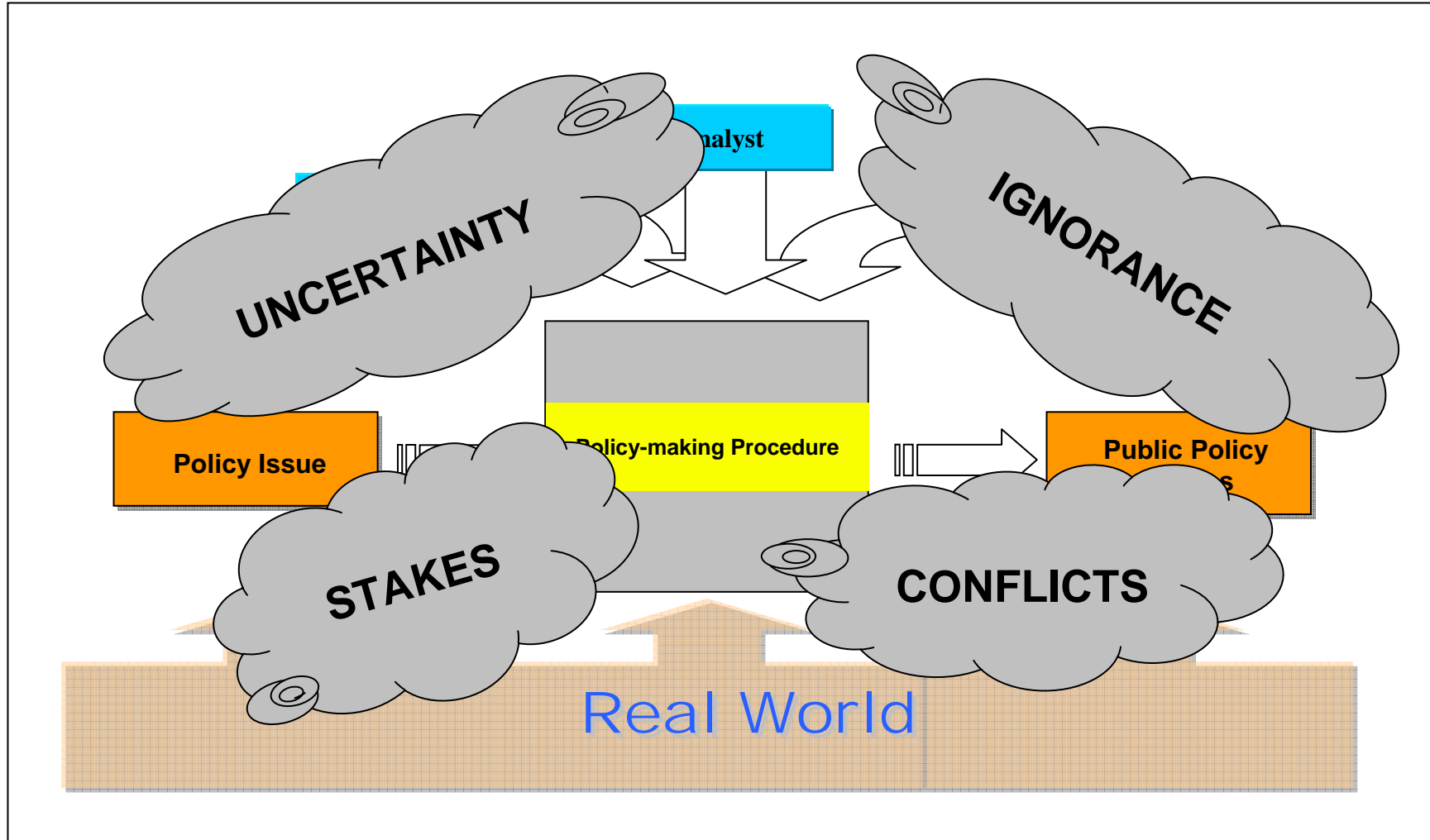
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# Decision-making Processes (1)



# Decision-making Processes (2)

- Public policy-making processes are not technocratic spaces
- Complex processes characterised by scientific & social uncertainty

## Problem-solving

- . Info Available & Use
- . Analyst's role
- . Decision-aid tools

## Framing Process

Decision-making spaces are influenced by interests, value judgements, opinions and perceptions

# Quality intended as ...

- British Standard Institution (1979) and the ISO 8402 (ISO 1986) define quality as “*The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.*”
- Plato stated “the quality of something is measured by its ability of reaching its goal”.

**FITNESS FOR USE**

# WHY Quality Assurance Processes (I)

“Most organizations produce a **product or service** intending to satisfy a user's needs or requirements. Such requirements are often incorporated in "specifications". However, **technical specifications may not in themselves guarantee** that a customer's requirements will be consistently met. For example, **there may be deficiencies in the specifications or in the organizational system to design and produce the product or service.** Consequently, this has led to the **development of quality system standards and guidelines that complement relevant product or service requirements** given in the technical specification”.

# A Monetary Valuation of ...

	Europe (mainly UK)	USA
Wage-Risk	2.8 - 3.5	3.5 - 5.5
Contingent Valuation	4.1 - 6.3	1.4 - 2.5
Markets	0.7 - 3.4	1.0 - 1.1
Average	2.5 - 4.4	2.0 - 3.0

*millions ECU (1990)*

Source: Corral Quintana, S (2000)

# WHY Quality Assurance Processes (II)

“Most organizations (**governments**) produce a product or service (**policies**) intending to satisfy a user's needs or requirements (**citizens**). Such requirements are often incorporated in "specifications". However, technical specifications (**decisions**) may not in themselves guarantee that a customer's requirements (**objectives**) will be consistently met. For example, there may be deficiencies (**uncertainties**) in the specifications (**information**) or in the organizational system (**decision- aid modelling**) to design and produce the product or service. Consequently, this has led to the development of quality system standards and guidelines that complement relevant product or service requirements given in the technical specification”.

# Quality Assurance Framework for Policy-making (1)

... development of quality system standards and guidelines ...

1<sup>ST</sup> CONSIDERATION

- **MORE** than just only **data & scientific information** to be assessed



# Quality Assurance Framework for Policy-making (2)

... development of quality system standards and guidelines ...

2<sup>nd</sup> CONSIDERATION

- Which are the attributes & criteria used in such exploring process

- What is the legitimacy of the results obtained of the application of such assessment criteria → META-QA PROCESS

Extended Processes

Scientific Peer Review

Extended Peer Review

# Quality Assurance of ...

- ▶ framing & social engagement
- ▶ *available information*
- ▶ *research team's role*
- ▶ *decision-aid tools*

# Quality Assurance of ...

## ► framing & social engagement

... Seeking to understand what were the basis to initiate a decision-making process in the chosen terms, i.e. how issues were formulated, actors identification, actors interactions, power relations, hidden agendas,...

**Institutional & Stakeholders Analysis**

# Quality Assurance of ...

- ▶ framing & social engagement
- ▶ available information

The information available to decision-making processes of public policies is frequently characterized by being:

- Information of diverse type. Quantitative and qualitative Info
- Information coming from different sources, it does not always present the same level of adjustment to the *problematique* analysed,  
Diversity of sources and types of knowledge influences the quality of planning processes.

# Quality Assurance of ...

- ▶ framing & social engagement
- ▶ available information
- ▶ *research team's role*

Usually the role played by experts during the analysis is considered neutral, but...

... transforming socio-environmental issues into policy problems, defining criteria and alternatives ...

# Quality Assurance of ...

- ▶ framing & social engagement
- ▶ available *information*
- ▶ *research team's role*
- ▶ ***decision –aid tools***

... the ways in which the assessment have been performed (decision-aid model, assumptions, etc.). Quality refers also to the transparency of the assessment procedures and to the robustness of results

# Quality Assurance Framework for Policy-making (3)

- To cover different dimensions on the elaboration of Public Policies
- Flexible, Transparent & Easy to use Framework
- each D-M process is unique
- multiple perspectives taken into account
- designing & implementation of QA criteria

**QAAT: Quality Assurance Assistant Tool**

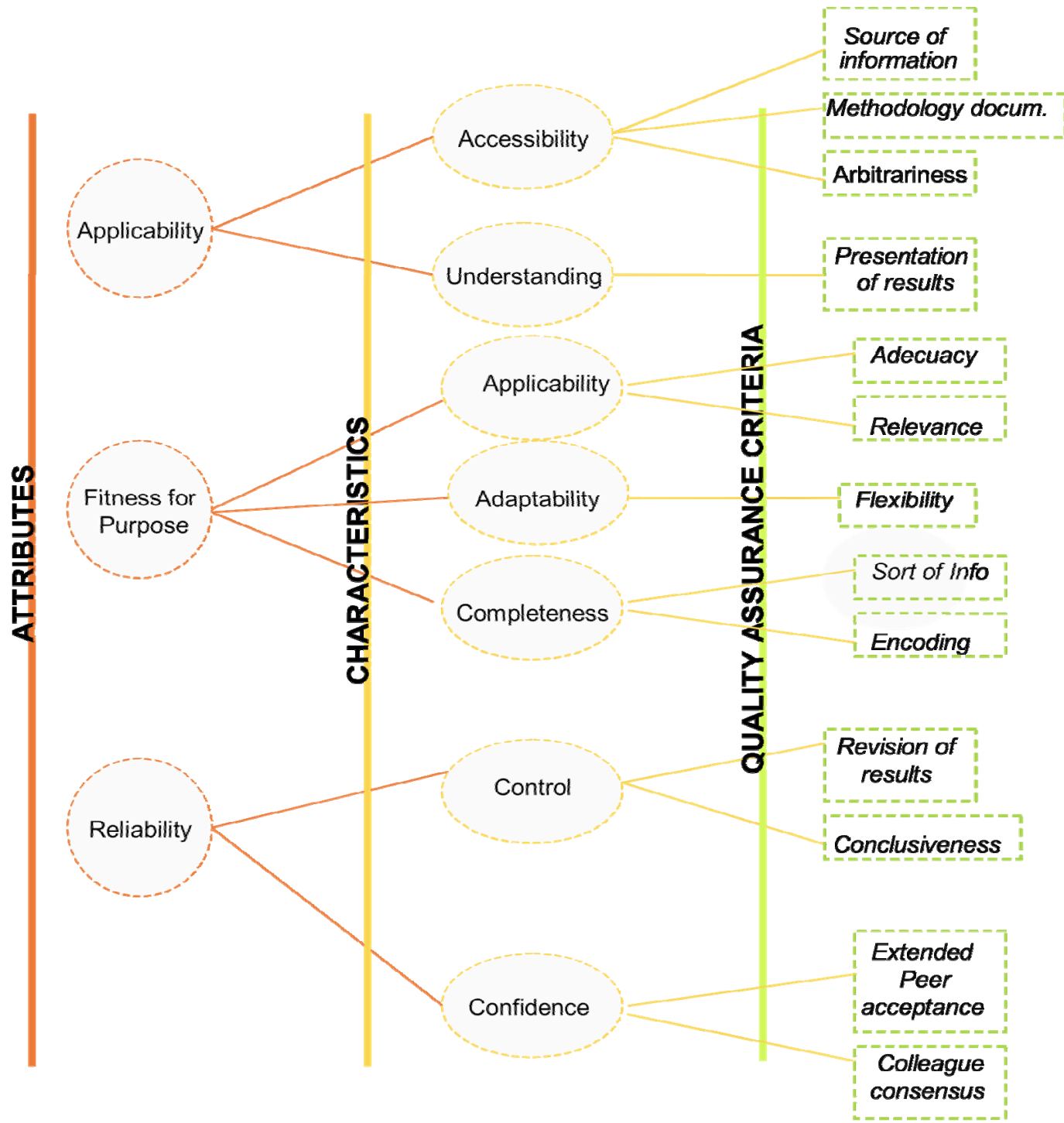
# Case Study (1)

- Problematicue: High Levels of Atmospheric Pollution (above EC standards)
- Policy Issue: Compliance with Citizens' concern
- Alternatives: Defined by Social Actors
- Assessment Procedures:
  - Mono-criterion Approaches (Monetary & Physical Valuations)
  - Multi-criteria App: Social Analysis (criteria defined by Actors)

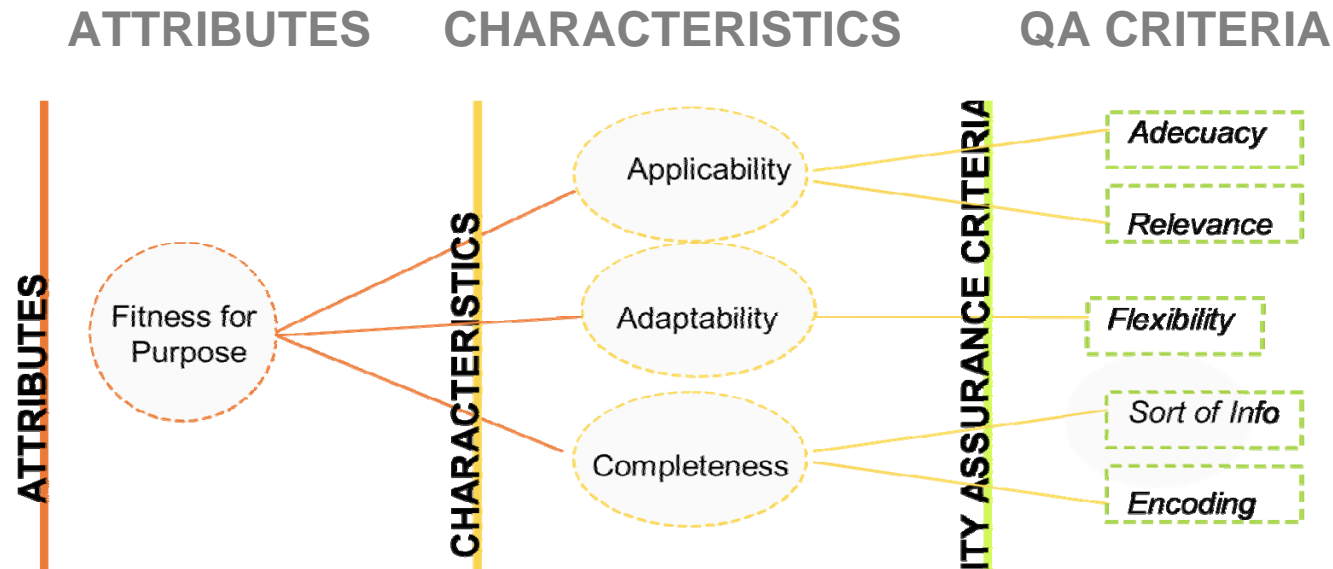


# Case Study (2)

- Extended Quality Assurance Process of Information, Analyst's role & Decision-aid tools
- Participants - WHO:
  - Scientists/Experts (Pollution, Human & Environmental Health, Economics)
  - Citizens (stakeholders, those affected, public authorities, NGO's)
- Participants – ROLE:
  - Attributes & Criteria defined by them
  - Quality Assurance Process carried out by them
  - Discussion of Results



## QAAT: Criteria for Information



**Fitness for Purpose:** To reach the aims for which it was designed or applied.

■ **Adequacy:** shall reflect the sensitivity of the information to reach the envisaged aims, that is to say, their adequacy to the problem.

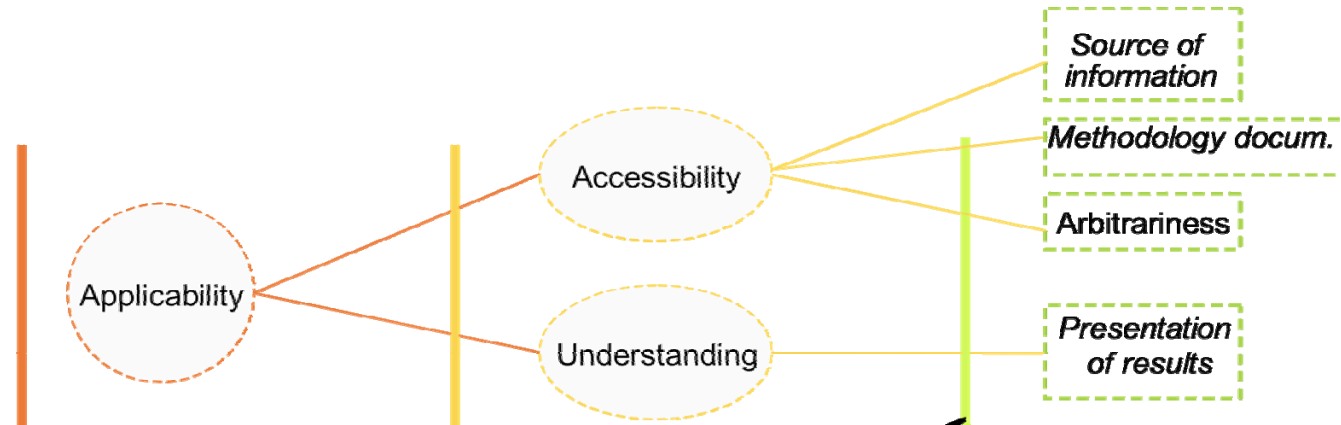
■ **Accuracy:** states the uncertainties related to the information analysed.

■ **Completeness:** is intended to examine whether the available data are complete or, on the contrary, they show some 'lacks' (i.e. incomplete series, stakeholder opinions not available...).

## ATTRIBUTES

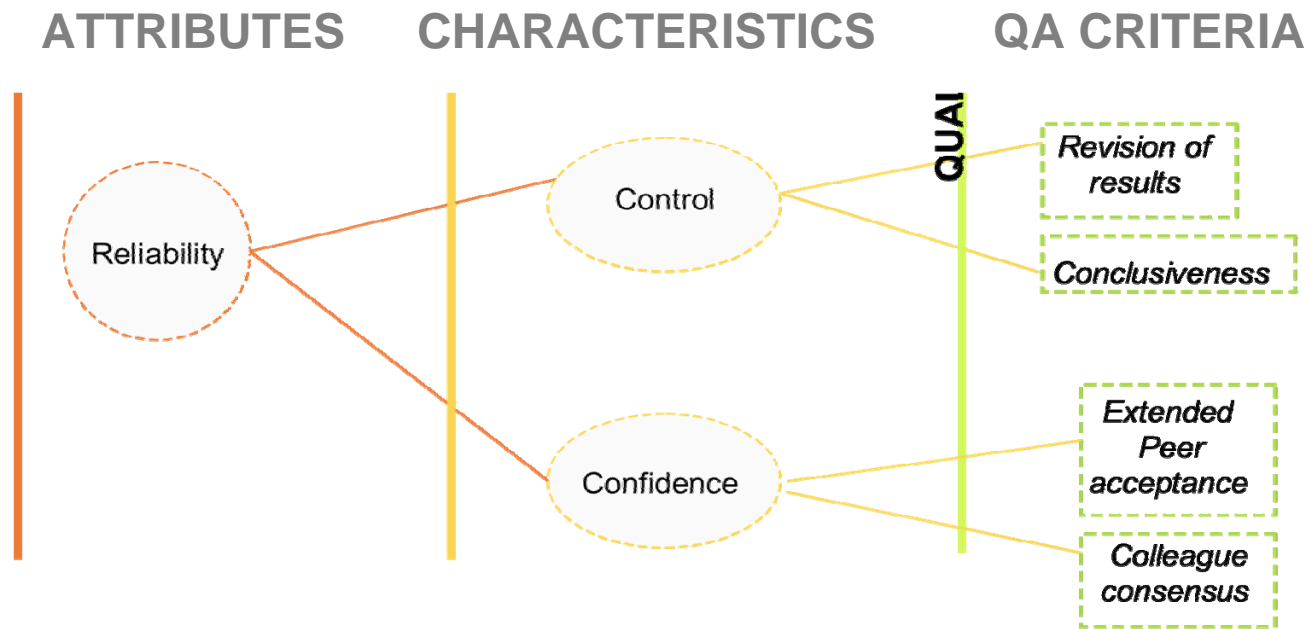
## CHARACTERISTICS

## QA CRITERIA



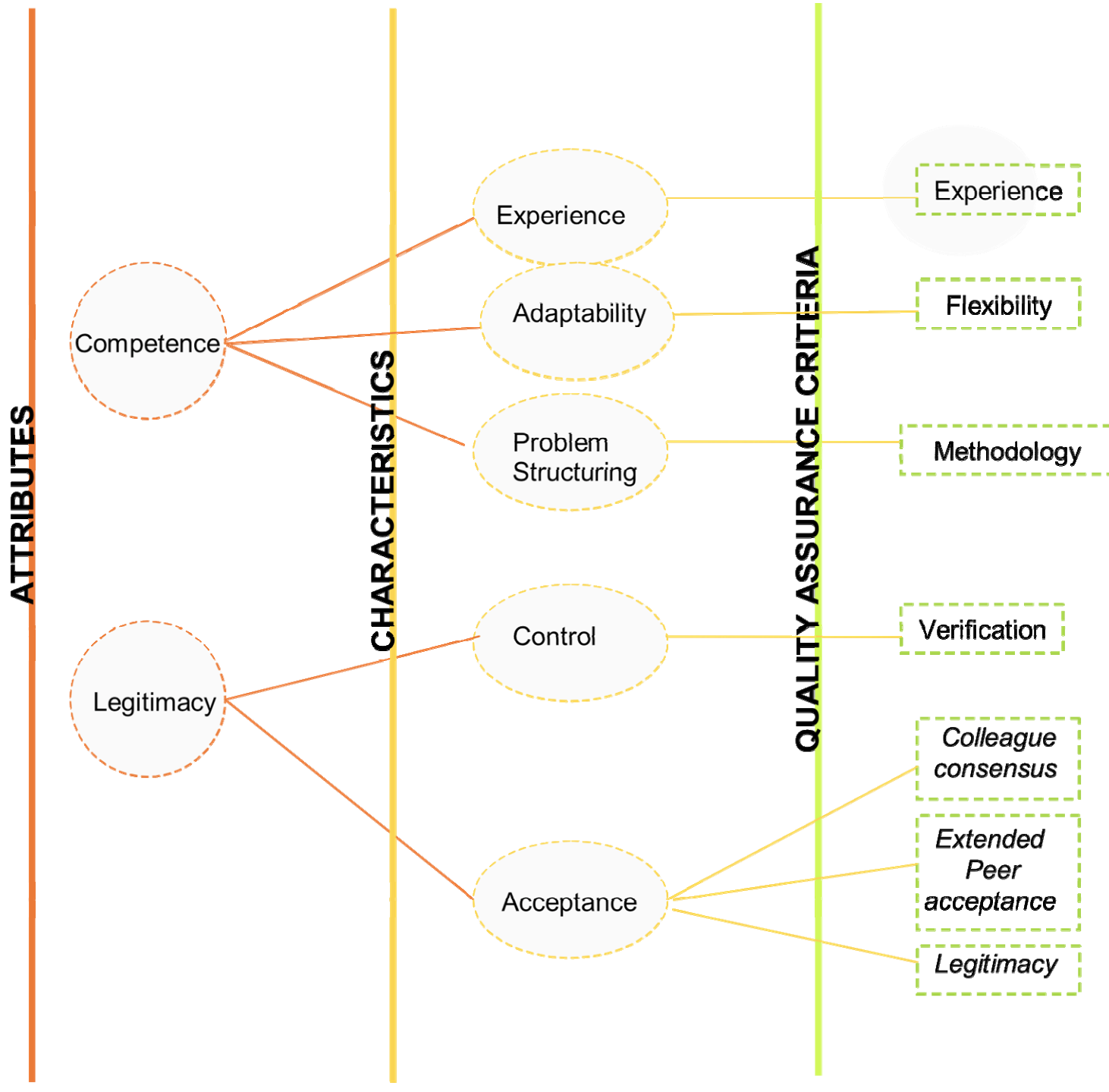
**Applicability:** When information cannot be used within a d-m process, its quality will certainly be affected. It is independent of the degree of adjustment of the Information.

- Accessibility: to the information and its sources plays an important role into the planning process. 'To be applicable has to be available'.
- Understanding: reflects the intelligibility of the information by the different stakeholder, as well as by the community at large. When data are not comprehensible, situations where some variables or effects are less valued (or on the contrary valued in excess) may arise, affecting the quality of the decision process.

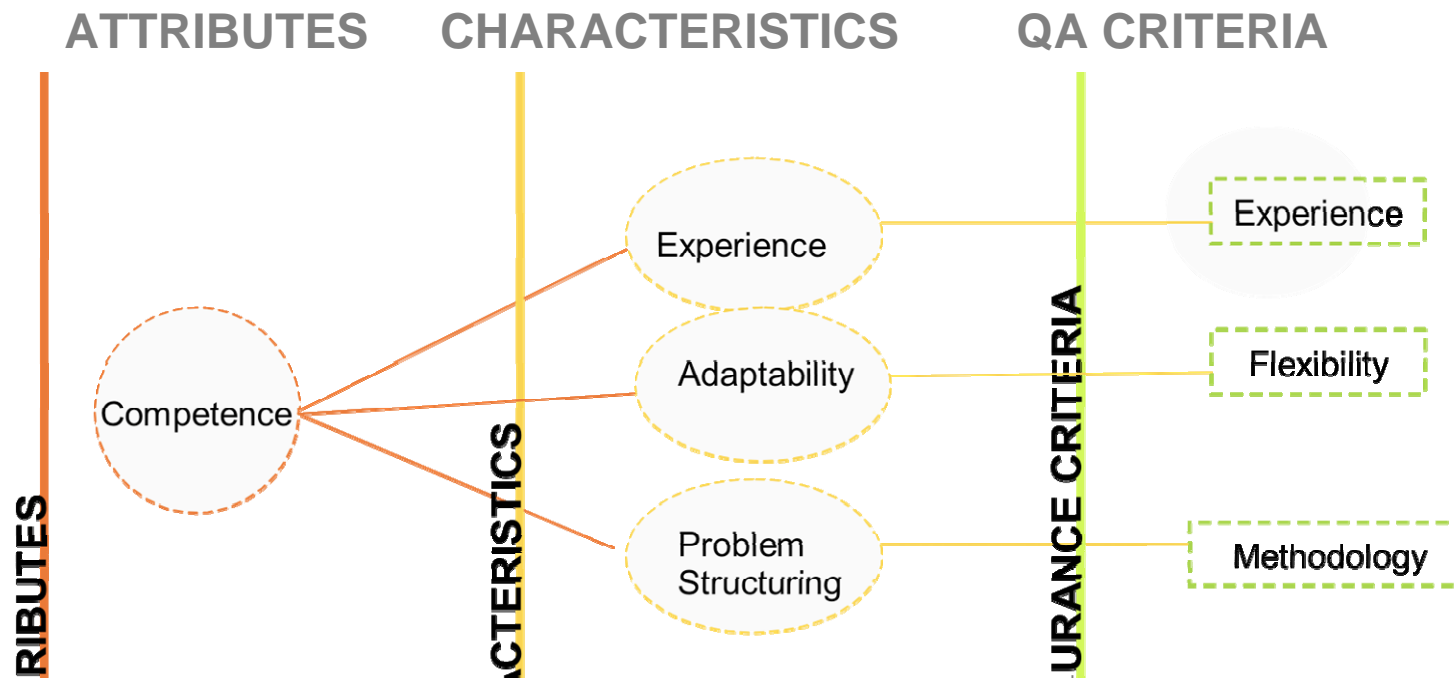


**Reliability:** Mainly when stakes are high, decisions are urgent (and in many cases irreversible) and there is irreducible uncertainty and ignorance.

- Control: the description of the sources and the process of verification of the information
- Confidence: deals with the degree of legitimacy of the data.



## QAAT: Criteria for the Analyst's role

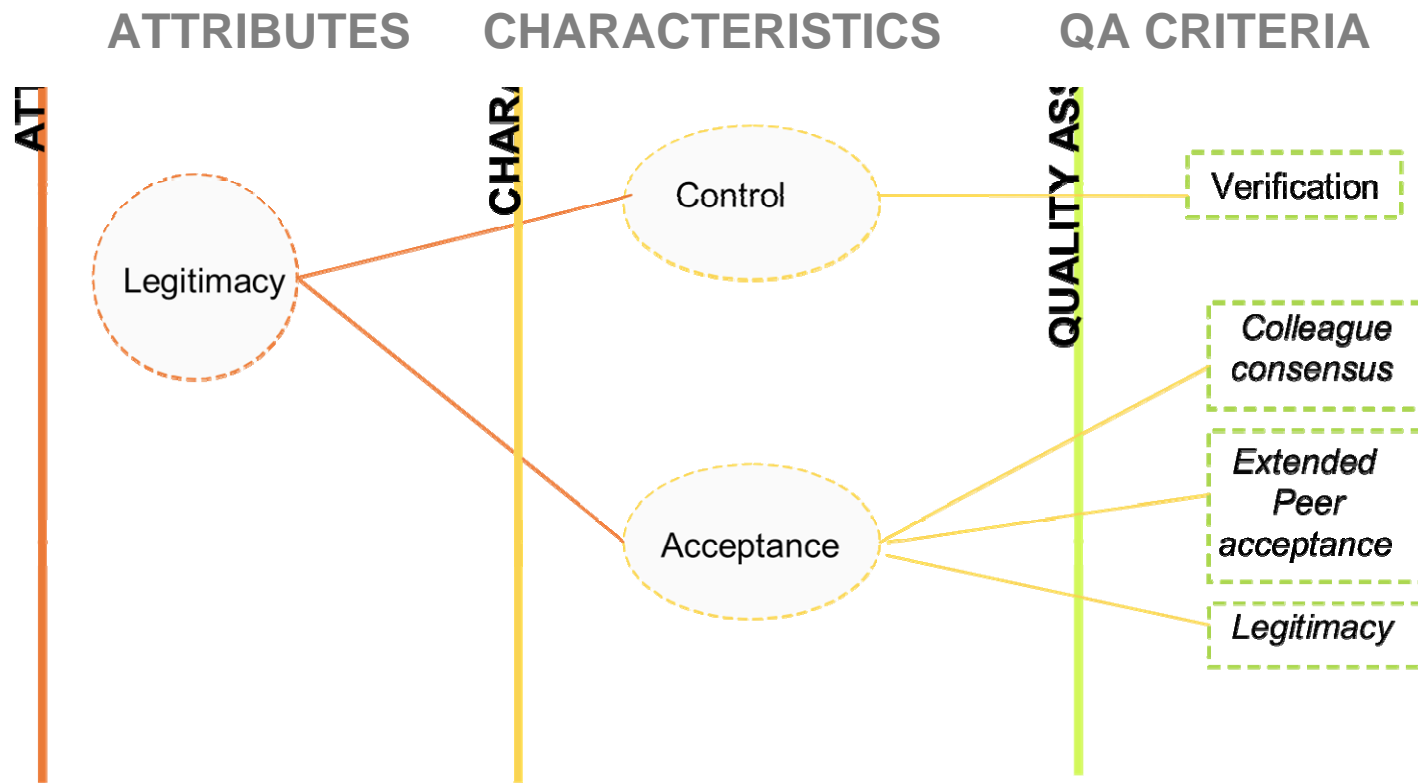


**Competence:** is intended to assess the experience of the analyst in addressing a particular policy issue.

■ Experience: of the experts in processing these *problematiques*

■ Adaptability: to deal with new components or characteristics of the issue

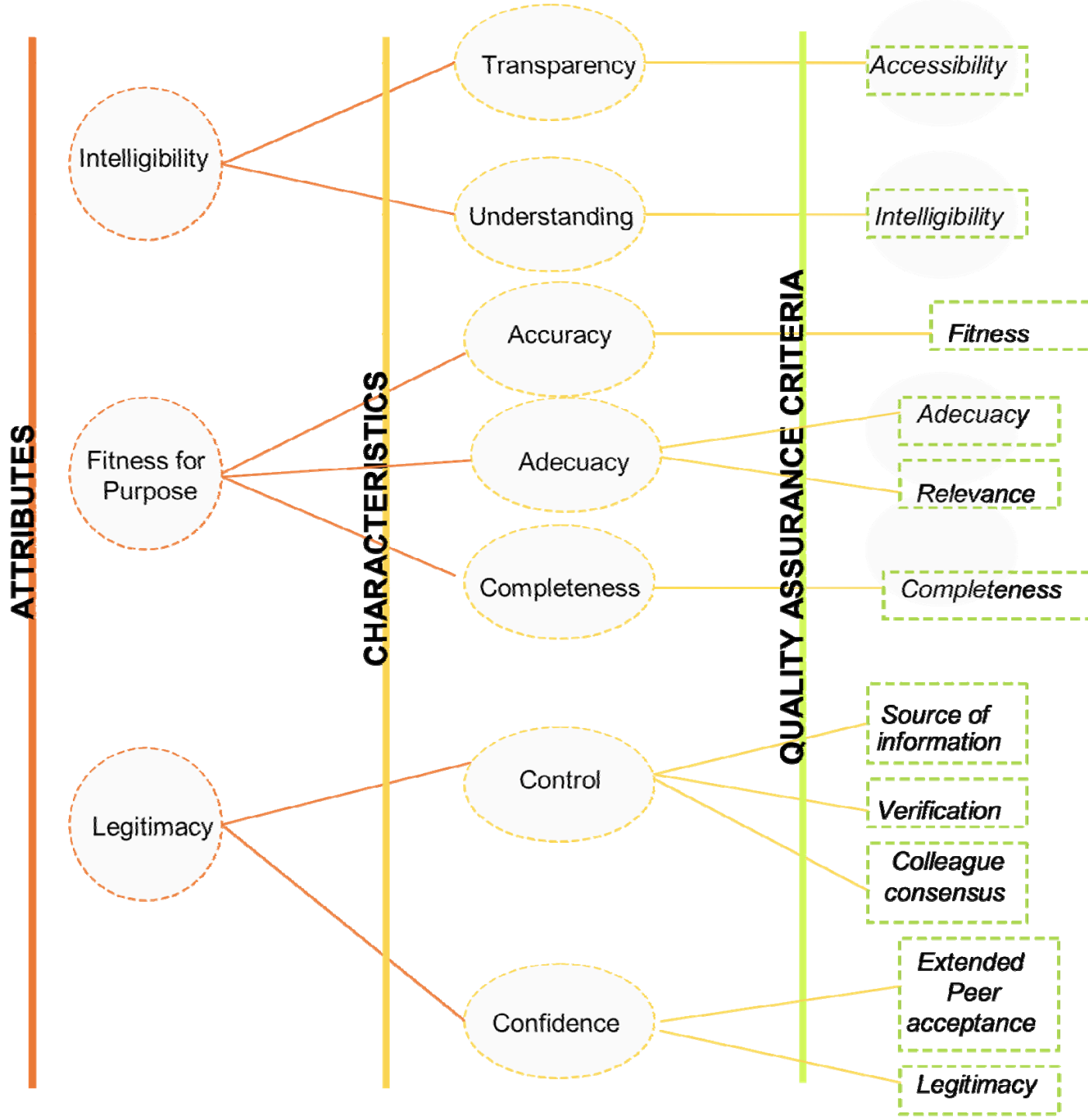
■ Problem Structuring: the way policy issues are structured



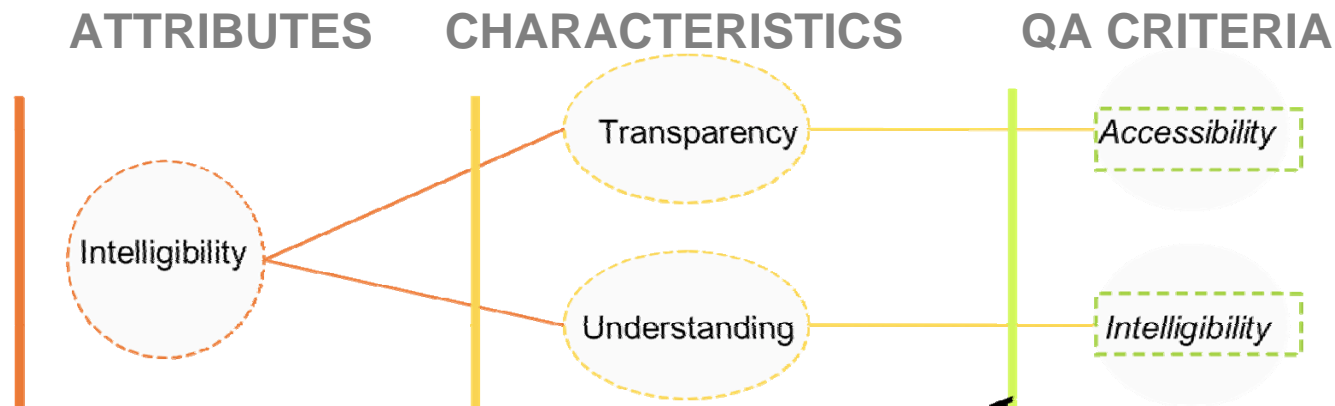
**Legitimacy:** copes with the process of verification passed by the methodology -either developed or implemented- by the analyst.

- Control: the description of the sources and the process of verification of the information
- Acceptance: different levels of acceptance are taken into account from peer review to extended peer review





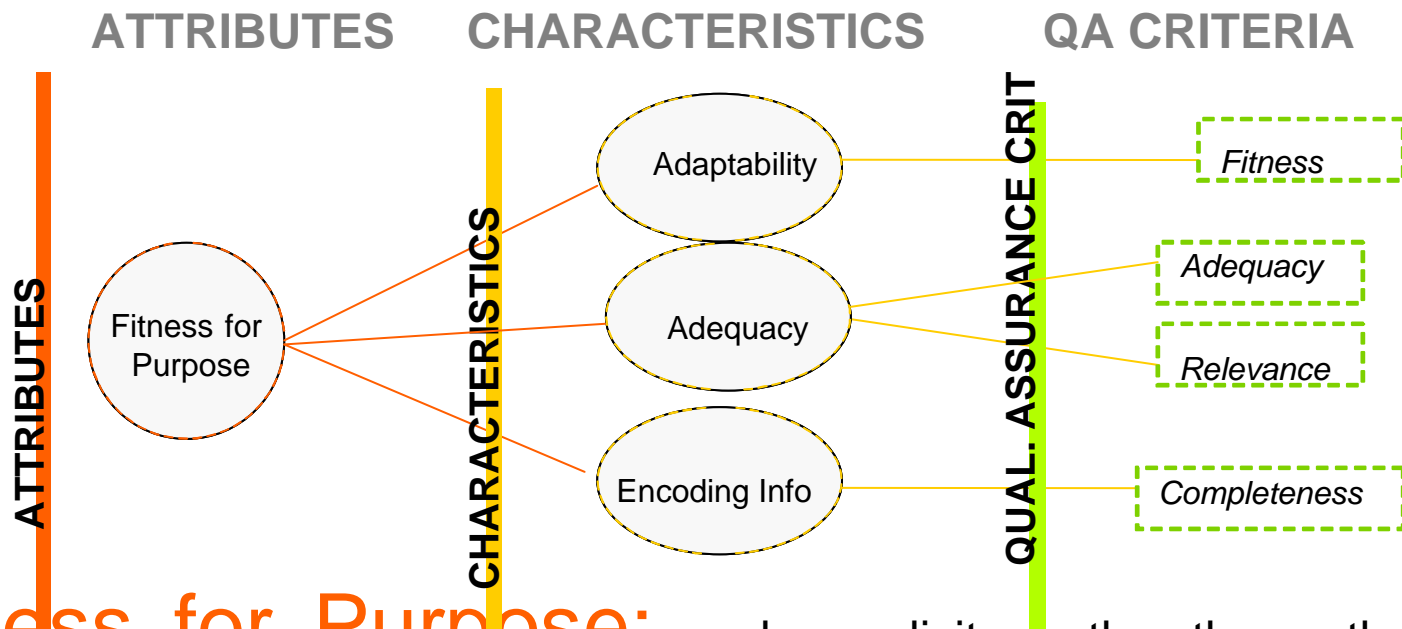
## QAAAT: Criteria for Decision-Aid Tools



**Intelligibility:** copes with the process of verification passed by the methodology -either developed or implemented- by the analyst.

- Transparency: the description of the sources and the process of verification of the information

- Understanding: different levels of acceptance are taken into account from peer review to extended peer review

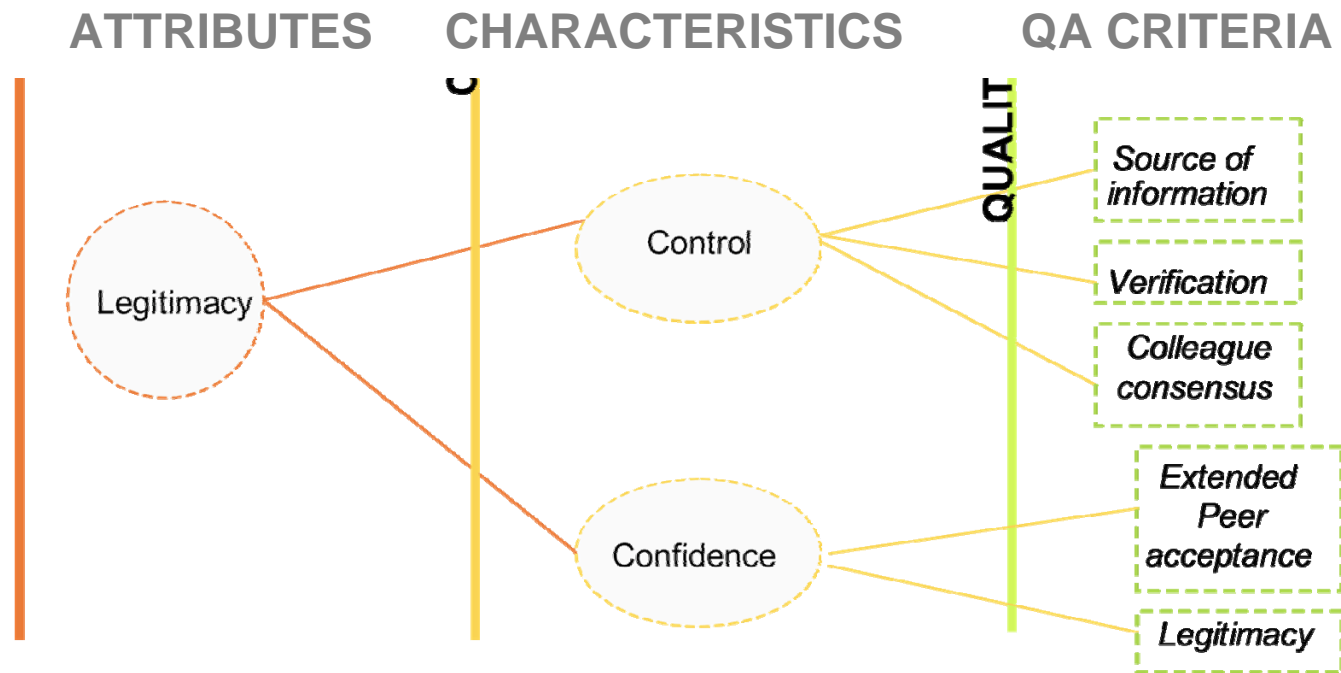


**Fitness for Purpose:** make explicit whether the methodology suits the issue under analysis. It tries to answer a crucial question: does the model fit the problem or is the problem being adapted to fit the model?

■ **Adequacy:** model's specificity will be analysed in terms of whether it was developed to deal with the specific type of issues or on the contrary it is a generic methodology used in several different spaces of decision-making processes

■ **Adaptability:** the way in which it may tackle non envisaged aspects..

■ **Encoding:** refers to data processing issues, namely, the necessity to transform, to codify or to translate the information in order to be used during the model process



**Legitimacy:** copes with the process of verification passed by the methodology -either developed or implemented- by the analyst.

- Control: the description of the sources and the process of verification of the information
- Confidence: different levels of acceptance are taken into account from peer review to extended peer review

# QAAT Software – QA Criteria Interface

**Esquema Pedigree - [Informacion - Aplicabilidad]**

Archivo Matrices Representacion La Cosa Ventana Ayuda

*Informacion - Aplicabilidad y Adecuacion*

<b>Tipo de Informacion</b> <ul style="list-style-type: none"><li><input type="radio"/> Expertos</li><li><input type="radio"/> Ambito Politico</li><li><input type="radio"/> Consultores</li><li><input type="radio"/> Opiniones Agent.</li><li><input type="radio"/> Percepciones</li></ul>	<b>Accesibilidad</b> <ul style="list-style-type: none"><li><input type="radio"/> Total</li><li><input type="radio"/> Sin Difusion</li><li><input type="radio"/> Academico</li><li><input type="radio"/> Permisos</li><li><input type="radio"/> No disponible</li></ul>	<b>Comprension</b> <ul style="list-style-type: none"><li><input type="radio"/> Agentes Invol.</li><li><input type="radio"/> Ambito Politico</li><li><input type="radio"/> Consultores</li><li><input type="radio"/> Academico</li><li><input type="radio"/> Expertos</li></ul>
<b>Adecuacion</b> <ul style="list-style-type: none"><li><input type="radio"/> Especifica</li><li><input type="radio"/> Casos Similares</li><li><input type="radio"/> Generica</li><li><input type="radio"/> Otros Problemas</li><li><input type="radio"/> Difusa</li></ul>	<b>Sensibilidad</b> <ul style="list-style-type: none"><li><input type="radio"/> Muy Relevante</li><li><input type="radio"/> Relevante</li><li><input type="radio"/> Suficiente</li><li><input type="radio"/> Poco Relevante</li><li><input type="radio"/> Irrelevante</li></ul>	<b>Compleitud</b> <ul style="list-style-type: none"><li><input type="radio"/> Total</li><li><input type="radio"/> Alta</li><li><input type="radio"/> Media</li><li><input type="radio"/> Baja</li><li><input type="radio"/> Desconocida</li></ul>

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# QAAT Software - Results Representation

