

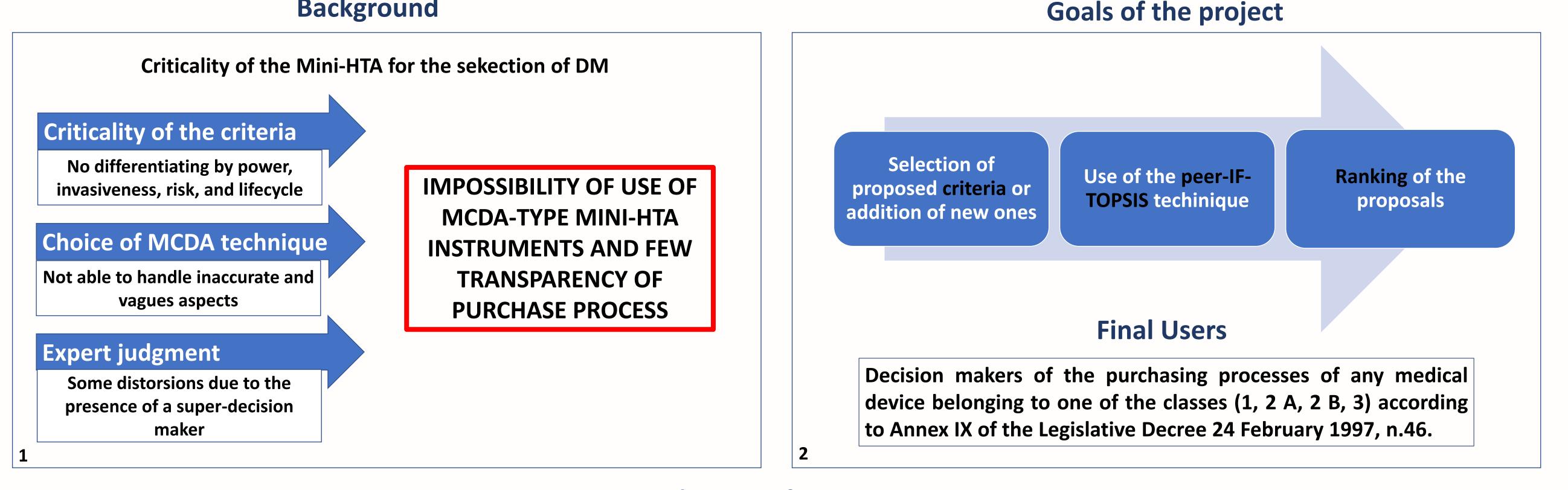
# MINI-HTA for *Medical Device* (MD) purchase **Between efficiency and effictiveness**

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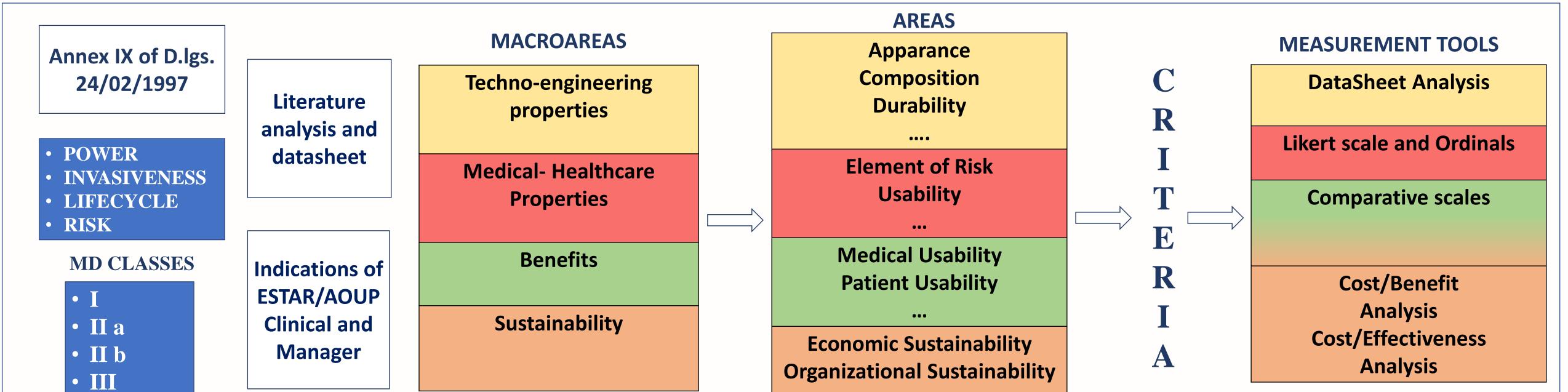
**CIRHTA - University of Pisa** 

INTERNATIONAL **CLINICAL ENGINEERING** AND HEALTH TECHNOLOGY MANAGEMENT CONGRESS

Background



# **Selection of criteria**



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CHOISE OF WICDA MELHOU				
AHP		vs	<b>IF-TOPSIS</b>	
PRO	CONS		PRO	CONS
Criteria and sub-criteria	Time consuming		Criteria and sub-criteria	Non-weighted decision-
Ease of use	Limited pair comparisons		Overcoming subjectivity	making skills
Easily achievable results	Calaculations complexity		Overcoming imprecision	Absence of organizational consent
Unique numerical	Subjectivity of judgments		Overcoming vagueness	
result				SOLUTION

### Choise of MCDA method

# Data collection and peer-based-IF-TOPSIS implementation

Each decision maker votes the importance of the others and all opinions, even personal options, are combined in an overall judgment

**Construction of the «aggregated weighted IF decision matrix».** Intuitionistic fuzzy positive-ideal and negative-ideal solutions

Calculation of the promixity coefficient relative to the ideal solution. **Classification of the different alternatives based on the decreasing order of** the relative proximity coefficient.

# **Contributions made**

Reducing waste in terms of both time and economic resources Ease of use on all MDs **Transparent and weighted purchasing processes** 



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peer-to-peer version