And what is next:

We'd like to involve you in contributing and revising towards a white paper on fairness and inclusiveness for Women in transport

The DIAMOND Project

Validation in four specific public and private transport sector scenarios

1. Railways and public multimodal transport

Research study on stations safety, accessibility and capacity to address basic mobility needs from a gender perspective. Validation of the self-diagnose and DSS tool for infrastructure and transport service planning.

2. Autonomous vehicles

Analysis of the comfort and perception of safety of automated vehicles to adapt the design and functionality of AV.

3. Vehicle (bike) sharing

Evidence of needs and requirements in the planning of vehicle sharing services addressing gender. Validation and diagnosis of DIAMOND's Decision Support System for vehicles points and fleet distribution and location planning.

4. Corporate social responsibility and employment

Research on women's participation in the transport and logistics sectors crossed with concrete job positions and new opportunities to translate this understanding into concrete better gender-oriented job descriptions and use of adapted candidate search processes.

Funded under H2020-EU.3.4 'Societal Challenges - Smart, Green And Integrated Transport';
MG-4-3-2018 'Demographic change and participation of women in transport';
GOAL: turning big and small data from different sources into actionable knowledge for addressing gender-specific needs in current and future transport systems;
CONSORTIUM: 14 partners based in 7 European Countries.

#FairTransportEmployment
#DiamondH2020

3

Three main overarching high level themes

WOMEN EMPLOYED IN TRANSPORT
Challenges and good practice from a
surface transport perspective

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4
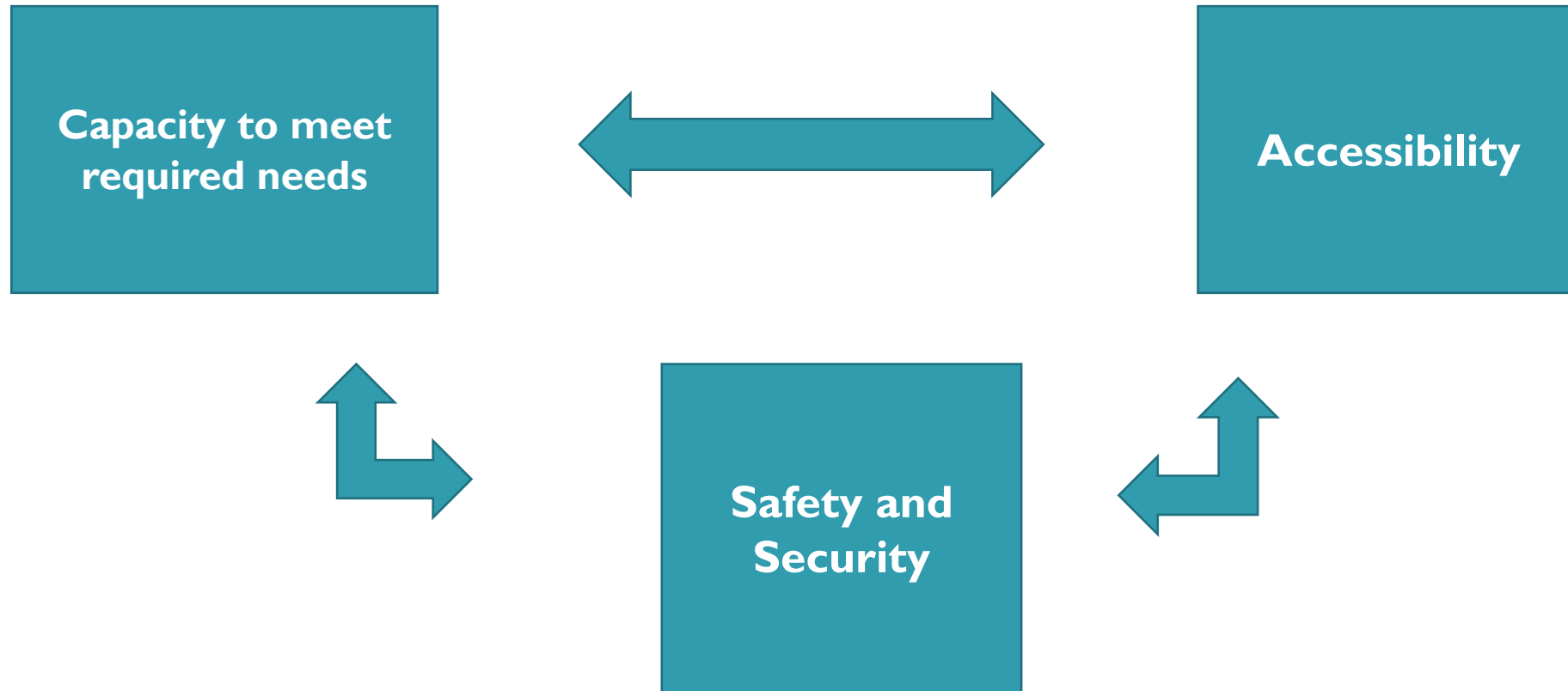
Fairness Maturity Model

Fairness Maturity model declined according to three main themes:

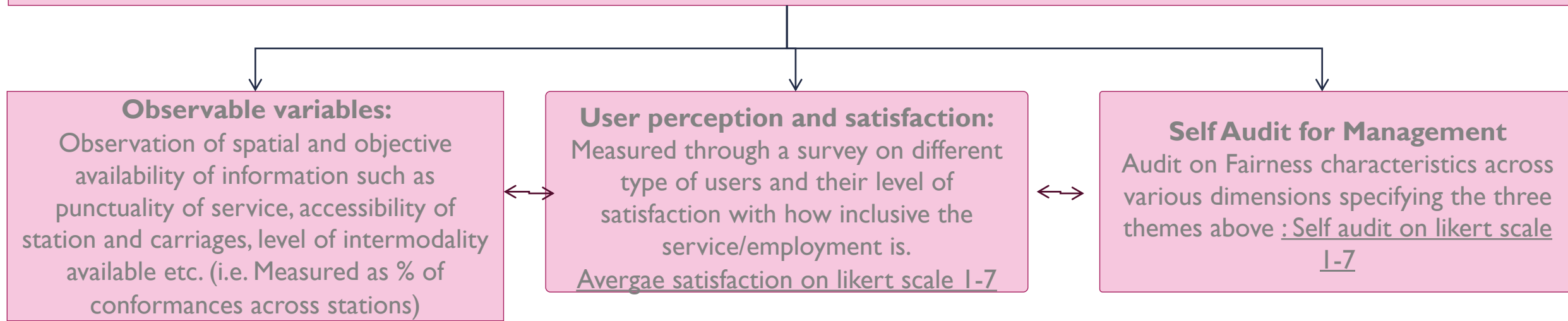**Capacity to meet required needs (**ability to travel in an appropriately designed transport system; meeting basic expectations and being environmentally sound,);
Accessible (ability to access activities and services that people have reason to value; accessible to all groups also in terms of design and comfort provided, e.g. those with children, and in terms of fares and costs for those with lower income, including distribution of costs and benefits);
Safe and Secure (ability to travel safely and securely for all type of users (e.g. income, ethnicity, age, those with children etc.)

Observable variables:
Observation of spatial and objective availability of information such as punctuality of service, accessibility of station and carriages, level of intermodality available etc. (i.e. Measured as % of conformances across stations)

User perception and satisfaction:
Measured through a survey on different type of users and their level of satisfaction with how inclusive the service/employment is.
Avergae satisfaction on likert scale 1-7

Self Audit for Management
Audit on Fairness characteristics across various dimensions specifying the three themes above : Self audit on likert scale 1-7

Based on Cooper M.D. (2000) Towards a model of Safety Culture, Safety Science 36, 111±136

Diamond Fairness and Inclusiveness Maturity Model

The key characteristics identifying different levels of organizational culture for inclusiveness and capacity for evolution within it. For example: an increasing capacity of organisational responses to improving hiring and retaining a diverse workforce, and provide employment condition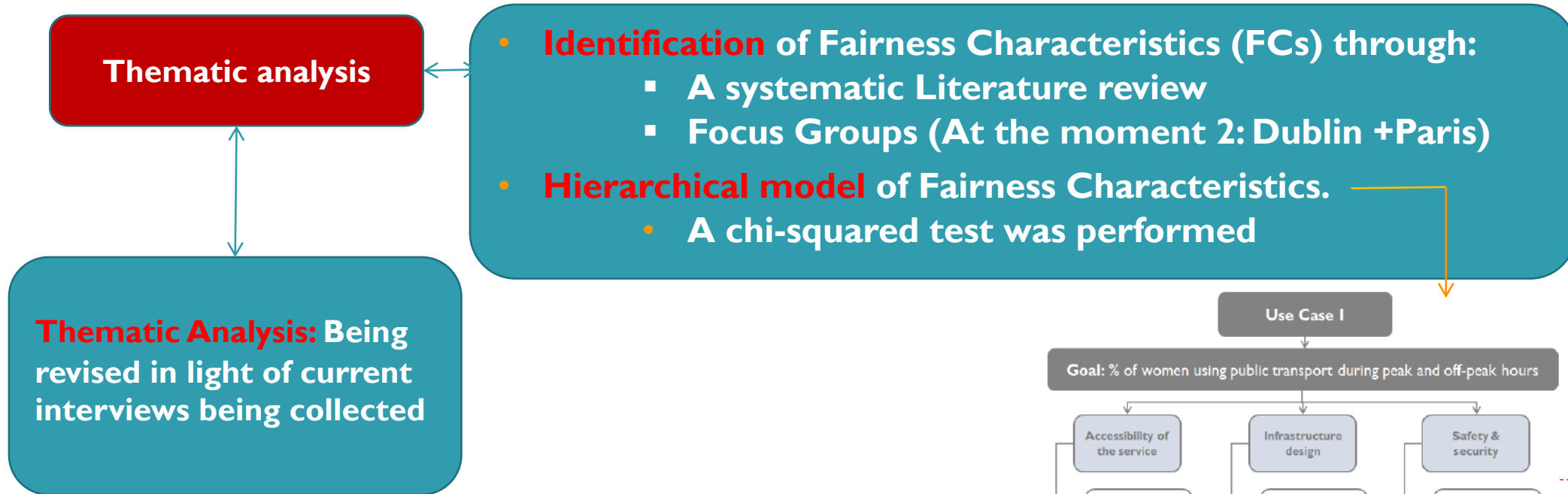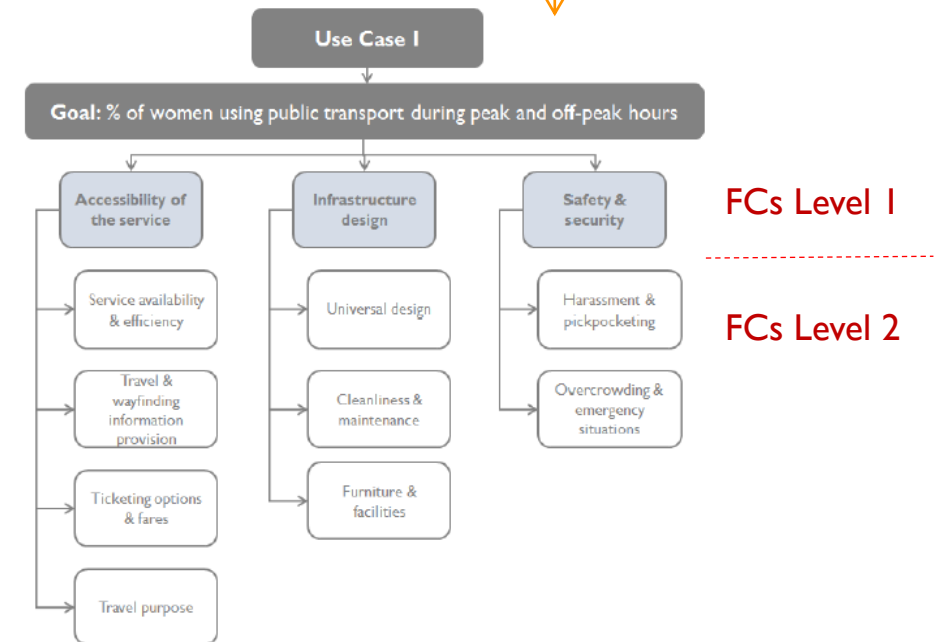s that are inclusive also towards different work-life balance needs (Such as managing caring responsibility for your family and or elderly) (Deliverable 4.2 Diamond)

level 4, above 75% of criteria above point 4

level 3, 45%-75% of criteria above point 4

level 2 Managing , 30-45% of criteria above point 4

Level 1(Emerging), 15-30% of criteria above point 4

Improving inclusiveness

Increasing consistency

Continuous improvement (Level 4)

Inclusive (Level 3)

Managing (Level 2)

Emerging (level 1)

Have a set of indicators to assess the capacity for inclusive and fair service/employment

Realize importance of engagement with diverse set of users/ employees in practice

Develop awareness and management commitment for inclusiveness

Methodology to achieve these Goals

Thematic analysis

- **Identification** of Fairness Characteristics (FCs) through:
  - **A systematic Literature review**
  - **Focus Groups (At the moment 2: Dublin +Paris)**
- **Hierarchical model** of Fairness Characteristics.
  - **A chi-squared test was performed**

Thematic Analysis: Being revised in light of current interviews being collected

García-jiménez, et al.(2020). *Methodology for Gender Analysis in Transport: Factors with Influence in Women ' s Inclusion as Professionals and Users of Transport Infrastructures. 12, 3656.* https://doi.org/10.3390/su12093656
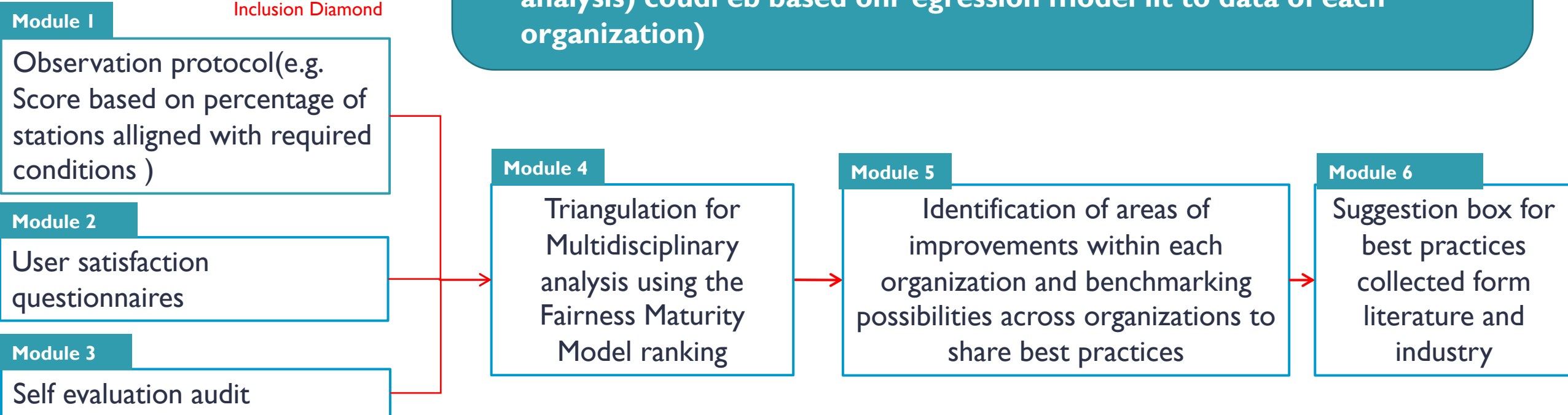

Use Case I

Goal: % of women using public transport during peak and off-peak hours

Accessibility of the service	Infrastructure design	Safety & security
Service availability & efficiency	Universal design	Harassment & pickpocketing
Travel & wayfinding information provision	Cleanliness & maintenance	Overcrowding & emergency situations
Ticketing options & fares	Furniture & facilities	
Travel purpose		

FCs Level 1

FCs Level 2

Methodology to achieve these Goals part 1

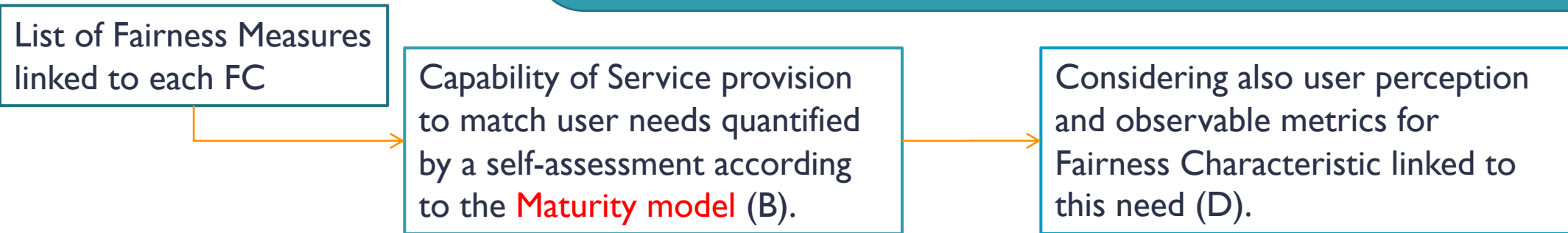**Actionable knowledge for the Toolbox from WP3 and WP4**

1. **Self-diagnosis module based on suites of observations protocols, satisfaction questionnaire and Self audit tools (Maturity Model ranking)**
2. **Decision support system based on results obtained from above**
3. **Prediction of improvement of perceived Fairness ((based on regression analysis) coudl eb based onr egression model fit to data of each organization)**

Per each vertex of the Inclusion Diamond

Module 1

Observation protocol(e.g. Score based on percentage of stations alligned with required conditions)

Module 2

User satisfaction questionnaires

Module 3

Self evaluation audit

Module 4

Triangulation for Multidisciplinary analysis using the Fairness Maturity Model ranking

Module 5

Identification of areas of improvements within each organization and benchmarking possibilities across organizations to share best practices

Module 6

Suggestion box for best practices collected form literature and industry

Methodology to achieve these Goals: option 1

Interdisciplinary analysis and Fairness assessment

- **Identification of Fairness Measures** for critical Fairness Characteristics.
- **Fairness assessment** model:
- **Maturity assessment model for service provision.**
- **Scoring on the basis of the data collected.**

List of Fairness Measures linked to each FC

Capability of Service provision to match user needs quantified by a self-assessment according to the Maturity model (B).

Considering also user perception and observable metrics for Fairness Characteristic linked to this need (D).

Self evaluation

From UESI

Anchor point from observations/ data

Capacity to provide for required needs

5   4   4

Accessibility

6   6   5

Safety and security

4   4   4

Weighted average with anchor point having the highest weight

Report scores in each categories highlighted discrepancies

AREA	Poor (1-2)	Medium (3-4)	Good (5-7)
CAPACITY TO MEET REQUIRED NEEDS Promotion, training, and development opportunities	There is no training specifically targeted at women	An awareness of training requirements not yet fully met	Equal access for all employees to training and development opportunities regardless of gender, age, ability etc.
ACCESSIBILITY Recruitment of women	No specific focus on gender in recruitment policies	HR policies encourage gender balance in some roles but not all	Gender Neutral recruitment policies are in place for all roles
SAFETY AND SECURITY: HR Policies gender awareness and anti-bullying	There are no formal internal processes to allow employees to report concerns	The processes in place to report safety concerns are done in an adhoc way with no formal structure	Open and accessible processes in place for reporting safety/security issues by employees

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WOMEN EMPLOYED IN TRANSPORT
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AREA	Poor (1-2)	Medium (3-4)	Good (5-7)
SAFETY AND SECURITY: Personal Protection Equipment suitable for women	All workwear and uniforms are of universal design – for men and women	Some workwear and PPE is of a universal design with some gender specific PPE available	Suitable and appropriate PPE for all sexes is provided to all employees Workwear and uniforms are designed to suit women
		Raw Score 9-63	
		Divide by 9	

Thank you!

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