

Alma Mater Studiorum Università di Bologna



NAMASTE - EU

**New Advances in the integrated Management
of food processing waste in India and Europe:
use of Sustainable Technologies for the Exploitation
of by-products into new foods and feeds**

KBBE-2009-2-7-02 “Valorization of by-products in food processing”
Collaborative project (small/medium scale) in coordination with DBT (India)

Fabio Fava

Consortium structure



NAMASTE EU



Alma Mater Studiorum-Università di Bologna, Italy (UNIBO). Coordinator : F. Fava ←



Institute of Food Research, England (IFR) ←



AZTI Tecnalia, Spain (AZTI) ←



Campden & Chorleywood Food Industry Development Institute Hungary, Hungary (CCH) ←



Agrotechnology and Food Innovations B.V., Netherland (A+F) ←



Grupo Leche Pascual, Spain (GLP) ←



J. Rettenmaier & Söhne GmbH + CO. KG, Germany (JRS) ←

NAMASTE INDIA

**North East Institute of Science & Technology, Assam, India (NEIST)
Coordinator : P. K. Goswami**

**Euro India Research Centre
Bangalore, India (EIRC)**

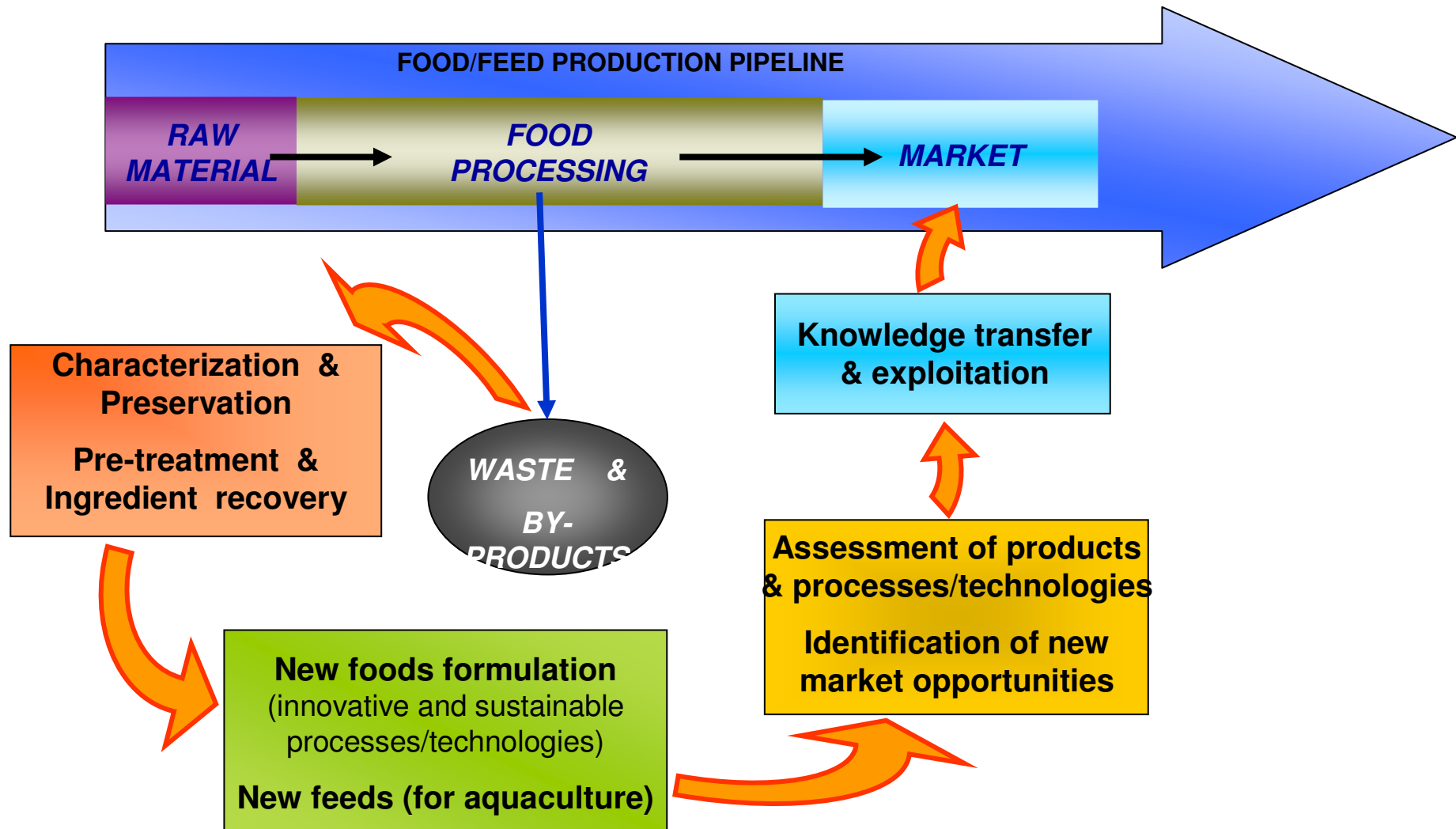
**University of Agriculture,
Bangalore, India (UAS)**

**Nature Fresh Logistics Pvt Ltd
Maharashtra, India**

**Desai Fruits and Vegetables
Mumbai, India (DFV)**

NAMASTE proposals: objective & approach

To develop an EU-India knowledge base and industrial backgrounds on the production of new foods and feeds from the fruit and cereal processing by-products/waste mainly produced in the two continents (e.g., *citrus waste* and *wheat bran* in EU & *mango/pomegranate waste* and *rice bran* in India).



NAMASTE EU: Rationale and objectives

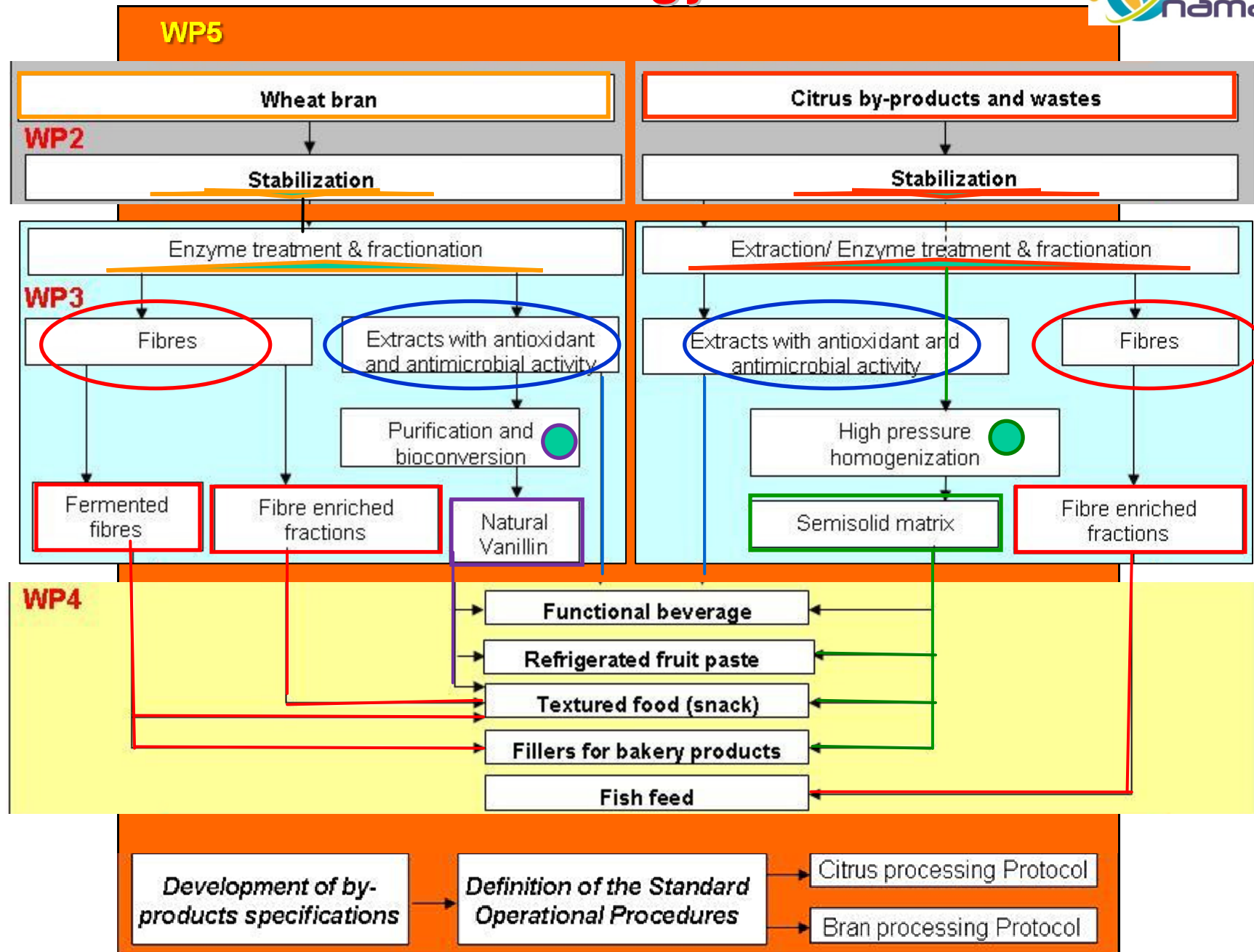


- The EU fruit and cereal processing industry produces large amounts of citrus peel, seeds, extraction pulp & wheat bran (~ 1 and 10 MT/year, respectively).
- They are only partially valorized (e.g., production of pectin, chemicals and solvents, fragrances, additives for bread/cereals, feeds); large portions of them are disposed in landfills, with costs and environmental problems.
- Such byproducts/waste contain compounds highly useful for human health, (Dietary Fibres, prebiotic oligosaccharides, antioxidants, functional compounds), exploitable as ingredients for new healthy foods and new feeds.
- A little has been done to test the technological and economical feasibility of this possibility. Conversely, the use of citrus waste and bran as feeds for ruminants is well known but nothing is known about their use in the formulation of feeds for Aquaculture, which is the fastest worldwide growing food industry sector.

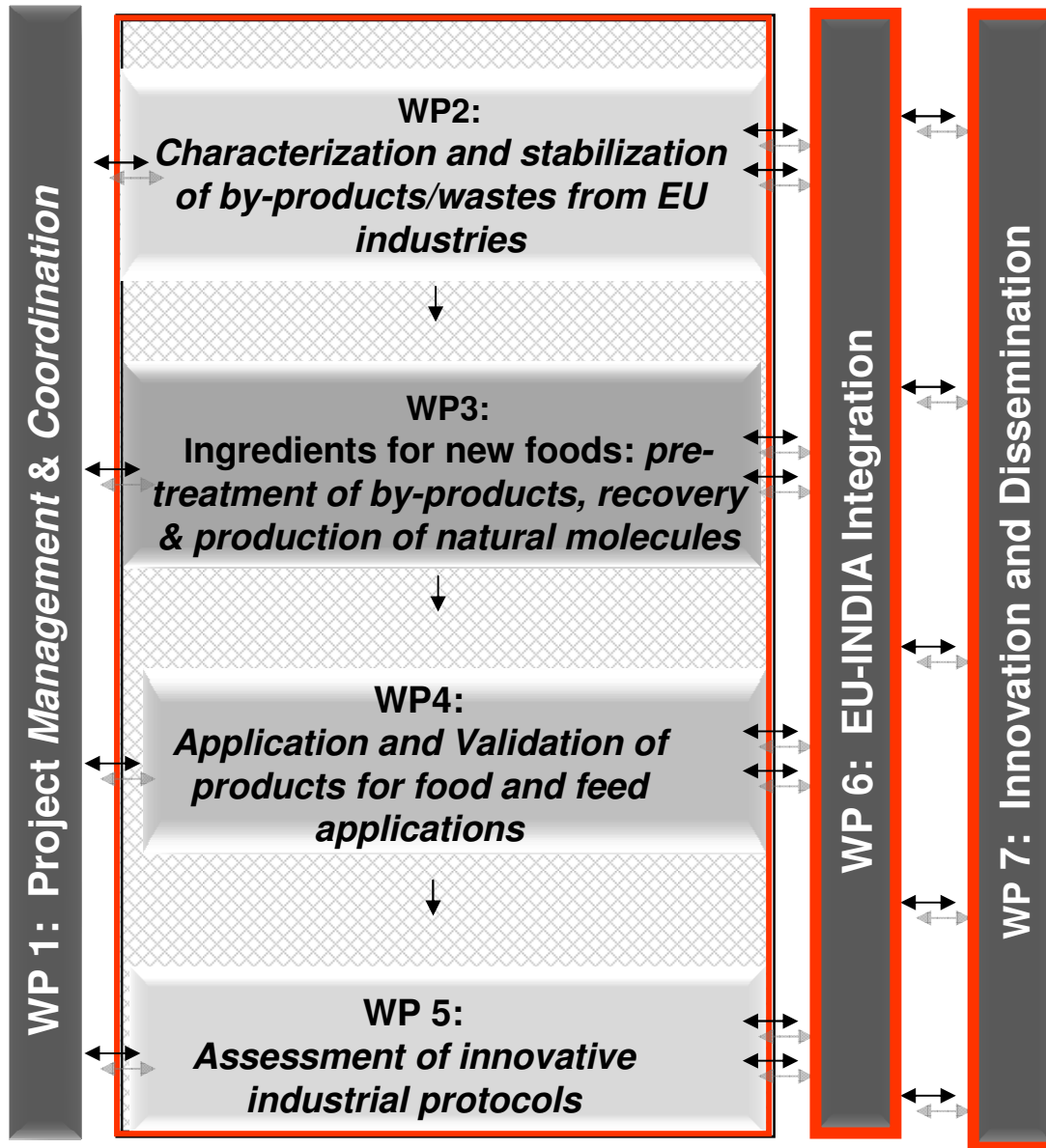


To develop and assess industrial-driven protocols and sustainable processes for obtaining ingredients and food constituents from citrus by-products/waste and wheat bran and for exploiting them in the formulation of new foods (i.e., refrigerated fruit paste, snacks, filler for bakery products, beverages) and a new feed for aquaculture.

NAMASTE EU: RTD Strategy and WPs



NAMASTE EU: Approach & Impact



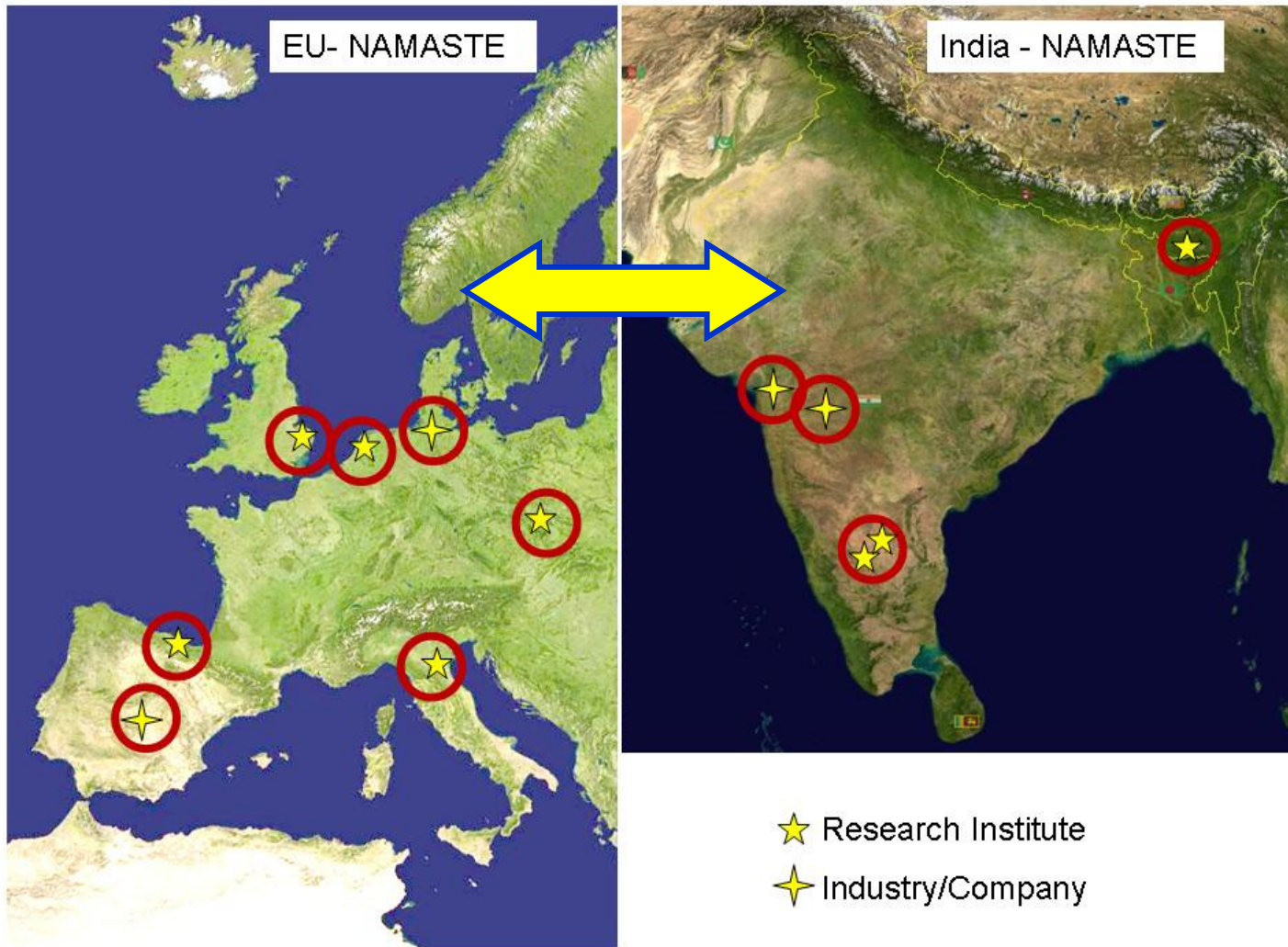
Consumers benefits: healthy safety and high quality foods

Increased industrial sustainability, via integration of food waste producers and waste exploiters

EU-Indian research cooperation: new common technical standards/protocols, regulations & policies

New EU-India market opportunities: an industrial platform as a first nucleus to develop new commercial relationships

NAMASTE: an EU-India joint opportunity



Thank you

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