

A stylized graphic element consisting of overlapping, curved shapes in a rainbow color palette (yellow, orange, red, green, blue) that curves upwards and to the right, resembling a wing or a flame.

SmartEES

BRINGING FLEXIBLE ELECTRONICS PRODUCTS TO LIFE

The Digital Innovation Hub

dedicated to

Organic and Large Area Electronics (OLAEs)



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Innovation Action:	Call: ICT- 04-2017
Number of partners:	10 partners from 8 EU countries
Grant:	4.5M€
Duration:	36 months
Expected results:	20 Application Experiments (AEs) 2.8 M€ (62% of the grant)
5 cut-off dates:	March 18 July 18 Nov. 18 Apr. 19 Sept. 19

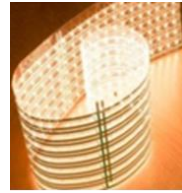




4 technology applications

- Organic photovoltaics
- Flexible displays
- OLED Lighting
- Electronics components & Integrated Smart Systems

Bringing Flexible Electronic Products to life

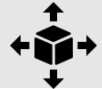


10 market sectors of application

Automotive



Logistics



Building & architecture



Medical & pharmaceutical



Consumer electronics



Packaging



Energy



Printing & graphic arts



Lighting



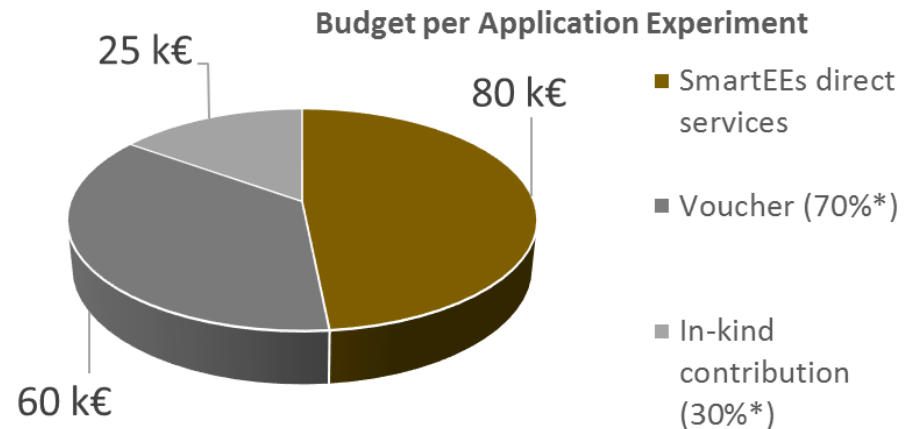
Textile & fashion



Budget at Application Experiment level



- Access to **140 k€** worth support:
 - ✓ 80 k€ worth **direct services**
 - ✓ 60 k€ of **voucher** (70%*)
- **25 k€ in-kind** contribution from the third party company (30%*)
- Total budget of **165 k€**



(*) H2020 funding rules for Private Companies





- **50 k€** worth of technical services giving access to flexible electronics technologies and their integration into **functional product demonstrators**
- **30 k€** worth of non-technical services preparing **business plan** and **scaling up**

Product development	Management of product development
	IP management
	Supply chain development and management
Business support	Business case validation
	Market validation - voice of the customer
	Unique value proposition and business model definition
	Business model development
Access to finance	Validation of business plans
	Sourcing public funds
	Private investment



- 60 k€ allocated to third party services

Table 2: SMARTEES Third Party profiles & commitment to Application experiments

		THIRD PARTY	COMMITMENT AND ROLE IN SMARTEES
Main third party		SME or mid-cap Innovative Companies (ICs)	Bringing in Product Concept ideas to generate functional demonstrators at TRL 6 & business model to open up new business opportunities
	Other third parties	Suppliers of ICs for designs, materials, components, equipment, and system-level integration processes.	Delivering services and developing parts and processes for fabrication of the functional demonstrators at TRL 6
Suppliers of ICs for testing and validation services		Delivering services and developing methodologies for testing and validation of the functional demonstrators in TRL7 conditions	
(Future) customers (end-users) of ICs' products		Providing product requirements and feedback about the functional demonstrators and business cases	



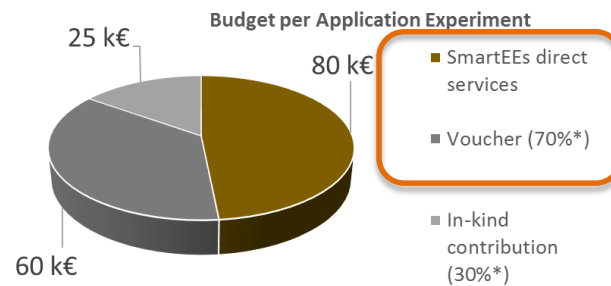
- Commitment in SmartEEs to link at least **two Application Experiments** (/20) with structural funds. One AE in Western Europe. One AE in Eastern Europe.
- Discussion being opened with S3P to share information and competencies to link application experiments with structural fund opportunities.



Pay-back conditions on successful experiments



- Payback conditions for Innovative Companies succeeding in the commercialization of products launched during the exploitation phase of SmartEEs (beyond the Application Experiment).
- These conditions will be fair and limited to the IC income associated to the SmartEEs-enabled products. For instance, payback would occur only in case of product sales and be limited in time, typically 3-5 years.
- These conditions will be stated inside the Service Delivery Agreement, before the Application Experiment actually starts.



Pay-back:

min 100% (140 k€)
max 300% (420 k€)



SmartEEs financial model outline (1/2)



SMARTEEES			BEYOND						
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10

Application Experiments (AEs)

Number of	6	7	7	7	8	9	10	11	12	13
Increase per year	-	17%	0%	0%	14%	13%	11%	10%	9%	8%
Cummulative number of	6	13	20	27	35	44	54	65	77	90

Expenses

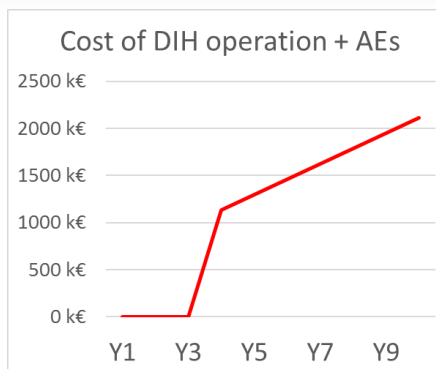
Investment in the marketplace	310 k€	310 k€	300 k€	-	-	-	-	-	-	-
Cost of AEs	840 k€	980 k€	980 k€	980 k€	1120 k€	1260 k€	1400 k€	1540 k€	1680 k€	1820 k€
DIH operational cost	260 k€	260 k€	260 k€	156 k€	178 k€	201 k€	223 k€	245 k€	267 k€	290 k€

(assumption of overall operational cost proportional to AE # and reduced by 40% by end of SmartEEs)

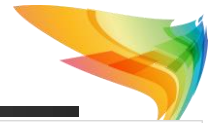
(Y1-Y3) INCOME

H2020 - ICT-04-2017 (4.5 M€)	1410 k€	1550 k€	1540 k€
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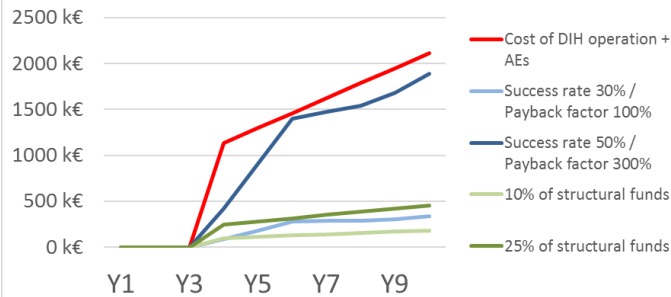
Balance 0 k€ 0 k€ 0 k€ 1136 k€ 1298 k€ 1461 k€ 1623 k€ 1785 k€ 1947 k€ 2110 k€



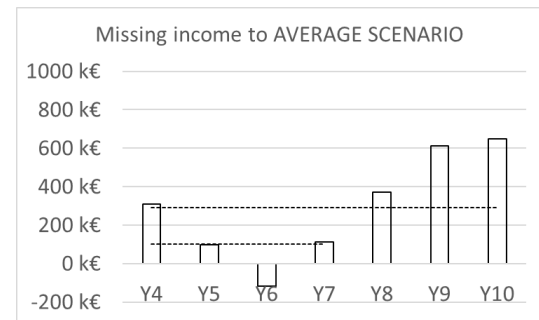
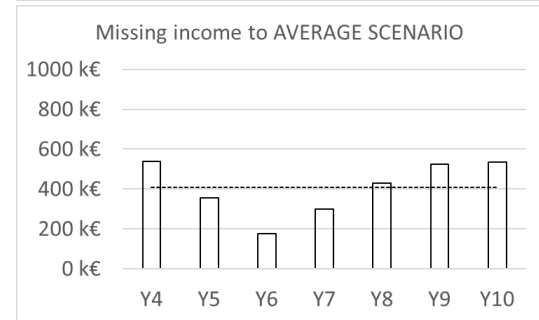
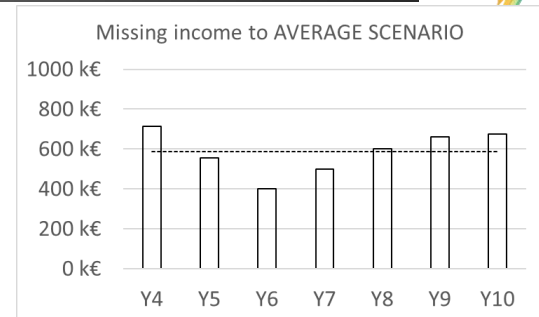
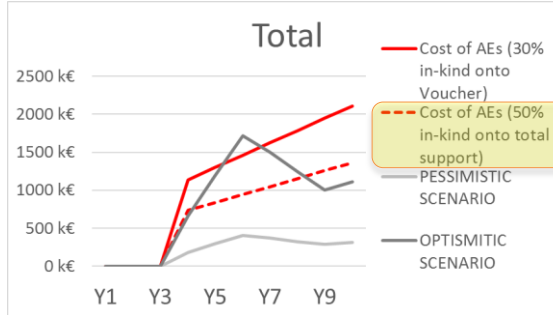
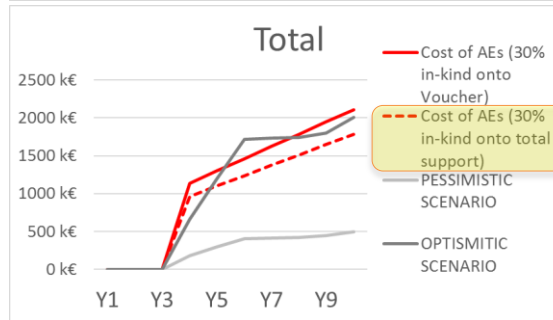
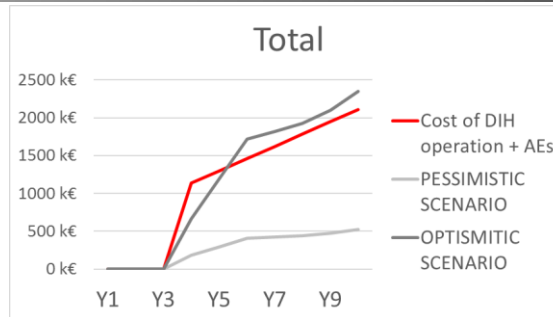
SmartEEs financial model outline (2/2)



Pay-back & Structural funds



Pay-back assumption:
starts 2 years after AE completion & spread on 3Y



Continuity Plan M19-M36



THANK YOU

