

WP8 Dissemination & Exploitation

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Task 8.1 – Project web-site

- To provide a central location for dissemination activities within the Project.
- Central repository for documentation within the HIPERDIAS Project (e.g. Minutes, Deliverables etc.)
- Monitor and Report on the Google Analytics.
- **Period 2 Progress**
- Responded to the Recommendations of the P1 report to make the necessary enhancements
- Web-site is now an integral part of the project



Task 8.2 – Dissemination

- Good Communication of the objectives, challenges and approach of the project through various channels
 - Web-site, Conference presentations, Invited talks
- In the latter months of RP2, the availability of more newsworthy content from the RTD progress has underpinned an expansion of Communication activities
- In the 2nd period: 3 publications; 5 conference presentations
- Strong platform for Dissemination and Communication in RP3 with the emergence of results in all 3 applications.

Task 8.3 – Exploitation

	A) Where are we now?			B) Where are we going?		C) How do we get there?	
	1.	2.	3.	4.	5.	6.	7.
PROCESS ELEMENT	Segmentation – defining market segments for focused development	Quality Requirements	Attractiveness	Deliverables	Ranking	Operationalising	New Income Streams
H2020 PROPOSAL ELEMENT	Concept & Impact	State of the Art (SOA) & Beyond	Impact	Scientific & Technological Methods	The proposal document will not be able to contribute		Post Project

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Period 1

BOSCH / LASEA– 3D Silicon Processing
E6 – Diamond Polishing
C4L – Precision Metal / Non-metallic cutting
AMP / XLIM / GLO – Micro machine glass cutting
AMO – Defractive Optics
USTUTT – Gratings / Thin disk amplifier
Deliverable 8.4 – Draft Exploitation and Dissemination Plan

Period 2

Workshops in Aachen, Limoges and Bern
Deliverable 8.6 – Interim Exploitation and Dissemination Plan (M30)

Period 3

Individual business cases, market research
Deliverable 8.7 – Final Exploitation and IP Strategy (M42)

Task 8.3 – Exploitation

- Initial PUD
 - It set out the process for managing EP in the project
 - Workshops in Aachen and Limoges
 - Worked through the process with the 3 Key Exploitable Results (KERs) focused upon systems
 - 3D processing of silicon
 - Diamond polishing
 - Fine Cutting of metals for the watch industry
- Interim PUD
 - Workshop in Bern (PESTEL Analysis) on the KERs
 - Updated EP research
 - Extended the EP process to look at the KERs at the sub-system level:
 - Seed Lasers
 - TD-MPA
 - Large Area Gratings
 - BDS

Task 8.3 – Exploitation

Priorities – System Level

<i>HIPERDIAS "Opportunity"</i>	<i>Attractiveness (A)</i>	<i>Project Strength (P)</i>	<i>Application Score</i>	<i>Application Rank</i>
<i>1. Laser machining system for 3D Si processing</i>	<i>3.9</i>	<i>3.8</i>	<i>14.62</i>	<i>2</i>
<i>2. Laser machining system for Diamond Polishing</i>	<i>3.5</i>	<i>3.8</i>	<i>13.12</i>	<i>3</i>
<i>3. Laser machining system for fine cutting of metals and glass</i>	<i>4.2</i>	<i>3.8</i>	<i>15.75</i>	<i>1</i>

Task 8.3 – Exploitation

- At EP workshop in Bern performed PESTEL analysis:
 - POLITICAL, ECONOMICAL, SOCIAL, TECHNICAL, ENVIRONMENTAL and LEGAL dimensions were discussed
 - The effects on each KER were discussed and any outcomes that could potentially inhibit the exploitation of an opportunity
 - The outcomes are included in D8.6

<p>PESTEL</p> <p>Element</p>	<p>Risk</p>	<p>Mitigations</p>
<p>Political</p>	<p>Political tensions between USA and Asia may affect world trade and may increase trade barriers. Transactions between Europe and Asia could be affected (KER #1, 2 and 3) which could potentially inhibit exploitation.</p>	<p>Ensure opportunities within Europe are maximised for Si ablation, diamond polishing and fine cutting of metals</p> <p style="text-align: center;">*</p>

PESTEL Element	Risk	Mitigations
Economic	Protectionism causing economic slowdown (KER#1,2&3)	Ensure opportunities within Europe are maximised for Si ablation, diamond polishing and fine cutting of metals *
	Anti-corruption efforts in the key Chinese market may cause a slowdown in economic growth (KER # 1,2 and 3).	*

PESTEL Element	Risk	Mitigations		
		Ensure opportunities within Europe are maximised for Si ablation, diamond polishing and fine cutting of metals	Maximise the collaborative efforts to support fibre BDS & ensure Dissemination contributes positively to perceptions of fibre beam delivery.	Focus business development on growth segments of the market for fine cutting of metals
Social	Growth in the adoption of smart watches could see demand for traditional, classical mechanical time-pieces decline (KER # 3).			*
Techno-logical	Expected adoption of fibre BDS for USP lasers (KER #1,2 and 3) does not materialise. This could help slow the market acceptance of HIPERDIAS solutions.		*	
	Growth in demand for flat screens in a range of consumer electronics slows. (KER # 1)	*		

PESTEL Element	Risk	Mitigations	
Environmental	<p>USP lasers have a lower environmental impact than the mechanical processes they typically displace. If the environmental agenda is marginalised this can reduce the speed the adoption of HIPERDIAS solutions. (KER # 1,2 and 3)</p>	<p>Leverage Testimonial results from HIPERDIAS early adopters to make the case for High Power USP lasers</p>	<p>Assume Leadership position in laser safety starting with HIPERDIAS project</p>
	<p>Concerns over high power lasers and the potential for emissions in the harmful x-ray wavelength (KER #1, 2 and 3).</p>	*	*
	<p>Potentially further legislation to regulate the sale of high power lasers. Already compliance is a significant feature of the sale of high power lasers. (KER # 1, 2 and 3).</p>	*	*

Task 8.3 – Exploitation

- Current Status Summary
 - Nothing detected in IP landscape that threatens HIPERDIAS exploitation
 - Confidence that Exploitation and Commercialisation Plans will be delivered and market acceptance of HIPERDIAS technology achieved.
 - Market Research Update
 - Potentially the growth rate of laser materials processing market higher than included in Annex 1 of the GA and in the Initial PUD
 - Not clear if these figures fully integrate news of escalating trade wars (see PESTEL analysis)
 - PESTEL analysis raised visibility of external threats
 - Trade wars may necessitate stronger focus on European market penetration than anticipated
 - EP process also includes consideration of sub-system opportunities
 - Seed laser (200W), large area gratings, TD-MPA, BDS

Task 8.4 – Intellectual Property and Supply Chain & Task 8.5 – Management of Intellectual Property

- The Consortium have established an IP Notification System:
 - MODUS track the Dissemination Activities
 - All Partners review the Dissemination Activities prior to publication to ensure no IP issues.

- The Consortium have reviewed IP issues at:
 - Consortium Meeting – Aachen, Germany
 - Consortium Meeting – Limoges, France
 - Consortium Meeting – Bern, Switzerland

Task 8.6 – Training

- Workshop @ LASYS June 2018
- 1st End-user engagement workshop
- Three expert speakers
- Mixed audience of expert users (e.g. TRUMPF) and novices
- Presentations followed by Q&A panel



Thank You