



**Project<sup>1</sup> Number: 649378**

**Project Acronym: FIRES**

**Project title: Financial and Institutional Reforms for Entrepreneurial Society**

## **Periodic Technical Report**

### **Part B**

**Period covered by the report: from 01/06/2015 to 31/05/2016**

**Periodic report: [1<sup>st</sup>]**

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<sup>1</sup> The term ‘project’ used in this template equates to an ‘action’ in certain other Horizon 2020 documentation

## 1. Explanation of the work carried out by the beneficiaries and overview of the progress

Over the reporting period (1<sup>st</sup> June 2015 - 31<sup>st</sup> May 2016) the work on FIRES project has started in all work packages and the consortium has made a substantial progress on all tasks already. In the first reporting period, we have submitted 15 deliverables (including 2 additional deliverables on ethics) to the EC, reached the 2 milestones provisioned, organized the Kick-off conference and participated at several dissemination events.

During the first months of the project, we have been advertising, selecting and hiring several junior researchers on the various deliverables and work packages. The updated list of all researchers participating in the FIRES project by 31 May 2016 is provided in table 1 below. Newly hired researchers are marked with an asterisk.

**Table 1: FIRES Researchers**

Partner number	Country	Acronym	Full Name	Participant Name
1	Netherlands	UU	Utrecht University (Universiteit Utrecht)	Mark Sanders
				Hans Schenk
				Erik Stam
				Jacob Jordaan
				Werner Liebrechts
				Niels Bosma
				Rens van Tilburg
				Jeroen Content *
				Gerarda Westerhuis
				Selin Dilli *
				Koen Frenken
				Andrea Herrmann
Lukas Held *				
2	Belgium	KUL	Katholieke Universiteit Leuven	Johannes van Biesebroeck
				Axel Marx
				Jan Wouters
				Philip de Man *
				Kathleen (Karen) Geurts
Ward Munters *				
3	Germany	FSU JENA	Fridrich Schiller Universitat Jena	Michael Fritsch
				Alina Sorgner
				Michael Wyrwich
				Moritz Zoellner *
4	Greece	UPRC	University of Piraeus Research Center	Claire Economidou
				Sofia Xesfingi *
				Dimitris Karamanis *
5	Hungary	PTE	University of Pecs (Pecsi Tudományegyetem)	László Szerb
				Gábor Rappai
				Tamás Sebestyén *

				Márkus Gábor
				Éva Somogyiné Komlósi
				Páger Balázs
6	Italy	POLIMI	Politecnico di Milano	Luca Grilli
				Boris Mrkajic *
				Gresa Latifi *
				Emanuele Giraudo *
7	Portugal	IST	Instituto Superior Tecnico	Miguel Amaral
				Miguel Torres Preto
				Catarina Seco Matos
8	Sweden	IFN	The Research Institute of Industrial Economics	Magnus Henrekson
				Mikael Stenkula
				Niklas Elert *
				Fredrik Andersson *
9	United Kingdom	LSE	London School of Economics and Political Science	Zoltan Acs
				Saul Estrin

At the same time, the project coordinator and project manager have been very involved in organizing the Kick-off meeting in Berlin, in Germany (September 2015). As that meeting was also partially a public event and there was no local organizer in the project, the start of the project required a lot of things being started up at the same time. The Kick-off meeting was organized one month later than originally planned in the proposal (in month 4 instead of month 3), as month 3 fell on August, summer holidays time, and September date was therefore much more convenient for getting the consortium together. As a result of postponing the Kick-off event, some deliverables in work package 1 and 7 were occasionally somewhat delayed (quality assurance plan and dissemination plan) but this did not negatively influence the overall progress of the project. After a successful launch in Berlin, all partners went to work. Several stakeholder consultation workshops have been organized (planned as part of D2.1, D2.3, D4.1, D4.3, D6.1). Some workshops are still to be organized in the upcoming period (those part of D2.2, D2.7, D3.3, D3.6, D3.7, and D4.6). Work on our many scientific deliverables was begun.

Already in January, the first scientific deliverables were submitted for internal review and although one cleared that process with minor revisions (D3.1), we had to ask for substantial improvements on another (D4.1). That deliverable suffered a delay as a consequence. Nevertheless, this also showed that our quality assurance procedures function as intended and the deliverable D4.1 was improved, and approved for submission with minimal delay. The deliverables for month 12 (D3.2, D5.2, and D5.3) have all been submitted and were cleared for submission to the Commission on time. And although no deliverables were foreseen in WPs 2 and 6 before month 12 work in these work packages has also started. In WP2 a working paper was prepared and published through the FIRES-website to start the discussion on how exactly to delimit different institutional complexes in Europe. In WP6 the work on mapping out entrepreneurship policy in the EU has started as well. The first deliverables in these work packages are foreseen without any delay for month 18 later this year. More detailed reports by work package are provided below.

Preparations for the second annual meeting, to be organized later this year in Utrecht, have also commenced. A working group for the Utrecht event was put together as early as January 2016. Since

then, several brainstorm and preparation sessions have already taken place, bringing together this working group and the Executive Board. The event itself is planned for 12<sup>th</sup> -14<sup>th</sup> October 2016. The draft program is ready and the keynote speakers have been invited (one is confirmed at the time of writing). At this event, the partners already plan to engage in a discussion on the FIRES reform strategy (D5.5). The research is still ongoing, but based on preliminary results, the partners are already shaping a preliminary reform agenda. A discussion on some preliminary ideas was initiated over email by the coordinator in May. It is important to initiate that discussion now for progress in work package 6 as there it is crucial to know what directions the reform agenda is going to take. It also allows all partners in all work packages to contribute early on in the discussion. With those preliminary ideas, the consortium will engage with vested interest groups and representatives in Finance, Labour, and Knowledge in the coming year, starting at our annual consortium meeting in October 2016.

As part of its dissemination and stakeholder engagement strategy, the FIRES project has prepared a special track at the 14<sup>th</sup> annual Interdisciplinary European Conference on Entrepreneurship Research ([IECER2016](#)), which will take place in Switzerland in September 2016. Currently, we are also negotiating a similar track for the World Interdisciplinary Network for Institutional Research’s annual conference 2017 ([WINIR2017](#)). On both occasions, we will engage with academics from all over the world to present preliminary results and discuss their implications. Our experiences with stakeholder engagement and their implications for our future engagement strategy are reported and motivated more elaborately below.

Overall the project is progressing according to plan. A more detailed report per objective, task and work package is provided below.

**1.1 Objectives**

The objectives of the project were listed in Table 1 of the DoA and reproduced below. In this section, we report on progress towards achieving these objectives below.

<i>Objective</i>	<i>Approach</i>	<i>Actions</i>
<b>Characterise Europe’s trajectories of national development in institutional arrangements</b>	History and Institutional Economics	Focus on institutions governing the creation and allocation of financial, human and knowledge capital  Identify and distinguish those that are deeply embedded from more superficial (and easily changeable) institutions  Identify and distinguish common roots and national/regional divergence in institutional development
<b>Urgency and desirability of the transition towards a more entrepreneurial economy</b>	International Economics, Economics of Innovation and Labour Economics	Collect data and analyse trends in specialisation patterns over global value chains  Analyse strategies for smart specialisation at the task-level for European nations and regions

<b>Tools to assess the current state of the entrepreneurial economy in Europe</b>	Entrepreneurship Studies	<p>Analyse job growth and opportunities through entrepreneurial activity</p> <p>Collect and analyse data on institutional quality and entrepreneurial activity at a national and regional level</p> <p>Focus on institutions governing the supply and allocation of financial, human and knowledge capital</p> <p>Develop entrepreneurship scoreboard to identify opportunities, bottlenecks and urgent reform strategies.</p>
<b>Tailoring reform strategies to European member states and regions</b>	Institutional Economics, Policy Design and Evaluation	<p>Focus on institutions governing the supply and allocation of financial, human and knowledge capital</p> <p>Distinguish strategies as short, medium and long run driven by institutional embeddedness</p> <p>Distinguish strategies by their most appropriate level as regional, national and European</p>
<b>Legal action and reforms required to implement the strategy effectively</b>	Administrative Law and International Law	<p>Translate proposals into specific policy actions for specific actors given current EU legal frameworks (treaties, national competencies and regional autonomy)</p> <p>Identify opportunities, problems and obstacles to implementing the proposed reforms in the current legal framework</p> <p>Propose required changes to European, national and regional legal frameworks where needed</p>

Work on all objectives has started and proceeds in parallel, perhaps with the possible exception of objective 5 that is central in work package 6. The final reform strategy evidently can only be formulated when the other objectives have been achieved. Still, a lot of preliminary work can be done towards achieving that objective. A lot of groundwork can already be done in mapping out the entrepreneurship policy as it is currently being conducted. That way, once more specific proposals are formulated, they can quickly be positioned and addressed to the appropriate policy making levels. Thus all partners have started working on their respective objectives right from the start of the project even if actual deliverables and deadlines are still relatively far in the future.

*On the first objective* of characterising the trajectories and institutional arrangements progress has been made by researchers in work package 2. It was decided we first needed a clear idea of how to delimit institutional arrangements geographically. To address that question, researchers Dilli and Elert (2016) have prepared a working paper that sparked a lively debate in the consortium on how to functionally and usefully delimit institutional complexes within Europe. We are all convinced that institutions differ a lot between Europe and the US or China, but of course, that diversity also exists in Europe and even across regions in member states. As institutional frameworks are typically multi-layered and the most appropriate and important level may differ according to the question at hand, there is not a single and final answer. But Dilli and Elert (2016) present a method for usefully distinguishing between different institutional regimes. This preliminary work was not foreseen as a deliverable in the project but will prove very useful throughout. The data work in work packages 3, 4 and 5 has already benefitted from this sensible and material delimitation of institutional arrangements. Work in especially work package 2 addresses the first objective in the table and is progressing as planned. We expect the first deliverables to be submitted on time in months 14 (D2.5), 18 (D2.1) and 22 (D2.4). The detailed progress report for the entire work package is presented below.

*The second objective* is to be achieved mostly through the work in work package 3. There too, progress has been made. The data to analyse specialization patterns and local economic impacts and determinants of entrepreneurial activity has proven to be available (D3.1) and is currently being collected for further econometric analysis (D3.2). Work focusing on the labour market will be delivered later this year and is ready for presentation at our annual meeting in October 2016. Again, more details on the progress made in work package 3 are presented below.

*The third objective* in the Table above is embedded in the work of work package 4. The data collection and extension work has commenced, but it turned out to be complicated to hire the foreseen capacity in this work package. Also, the work package leader leaving his position at London School of Economics complicated a smooth take off in this work package. All is now settled and progress is being made, but in developing our assessment tools we have encountered some mild delays in the first deliverables. It was decided to re-allocate some task and time in this work package to better integrate and speed up the work.

The stakeholder consultation workshop on D4.1 and D4.3 (Utrecht, January 2016) as well as the discussion at the Kick-off meeting (Berlin, September 2015) have shown that the chosen method for mapping the quality of entrepreneurial ecosystems is deemed both useful and promising in the field, but will also benefit from careful further analysis and extension of the scope to include finance, labour and knowledge institutions, specifically. With the first deliverable, the responsible researchers identified, collected and described what variables and data should be added to the original indicator and the compilation of time series for the improved indicator is underway. The pan-European database that was foreseen for month 12 and a milestone (MS4) for the rest of the analyses in this work package was still slightly delayed. We expect work in this work package to be fully back on track by September of 2016. Data collection work involving the aggregation of waves of the Global Entrepreneurship Monitor at the NUTS2-regional level for the cross-sectional dataset has started in parallel and no delays are foreseen in achieving that milestone in month 18 (MS5).

*The fourth objective* is greatly aided by the work as described under objective one in work package 2 and the case studies that have by now been delivered in work package 5. The latter do not necessarily show how specifically a reform strategy should be tailored to a specific national context. Nevertheless, both the case study on Dutch Solo Self-Employment and London's Crowdfunding Scene show us that national institutional contexts matter a great deal in shaping (or preventing) entrepreneurial

ecosystems to develop. The data collection effort on start-up processes across institutional complexes in work package 5 has been initiated without delay and data has been collected for Germany already.

Working towards *objective five* has started by mapping carefully how entrepreneurship policy is being implemented in Europe today. Our proposals may well lie beyond the scope and competence of the more traditional entrepreneurship policy makers, but of course, we should start there. As the specific targeting of our policy proposals and institutional reform strategy can only be done when we have reached consensus on what to propose, the process of building that consensus should start early in the project. As indicated above we have started the policy and reform strategy discussion in the consortium already now and will continue that discussion throughout the project, keeping those involved in work package 6 well-informed and iterating frequently between legal feasibility and economic desirability.

Overall it can be concluded that the FIRES-project is making significant progress on all stated objectives. We have intensified our efforts on the objective to accurately map the quality of entrepreneurial ecosystems in Europe. Finally, establishing the need and desirability of a more entrepreneurial Europe receives much external support as policy makers in Europe all embrace the Entrepreneurial Society.

## **1.2 Explanation of the work carried per WP**

### **1.2.1 Work Package 1**

#### Summary of progress towards objectives specified in Annex 1

The main objective of work package 1 is to manage the entire project and coordinate the work between all the partners, and with the European Commission. Overall, the project management of FIRES is well on track and the management structure has been implemented to the satisfaction of all parties.

By the end of the first reporting period, 15 deliverables have been submitted and 2 milestones were achieved. Some of the deliverables were slightly delayed compared to the original plan, however, these delays had no effect on the overall progress of the project. To ensure the high quality of all these deliverables, the quality assurance procedures have been put into practice and proved to work effectively.

The coordinator has been in close contact with all the partners since the start of the project. The research content issues are communicated mainly through the WP coordinators within the respective work package, whereas the overall issues having an impact on the project as a whole are communicated through the coordinator directly to the entire consortium. The scientific coordinator has visited partners in Portugal, Italy, Belgium and Sweden and Utrecht University hosted the PI from Piraeus University as an external research fellow for 3 weeks in January. These visits were organized at the expense of Utrecht University, not using the FIRES funding, but are of a great benefit to the project. Next to the research channels a parallel mailing list and communication channels were established with the administrative and financial support offices of all beneficiaries, in order to communicate and discuss administration-related issues. So far this structure has proved as an efficient and effective communication tool.

In addition to the formal reporting to the EC, an interim internal reporting procedure has been set up to ensure that all partners are fully on track and communicate any possible changes to the coordinator. This interim reporting was organized through two channels – through the financial and administrative

support on financial issues, and through the work package coordinators on the research related progress. The interim reporting proved very useful when the deadline for this formal reporting approached.

During the first reporting period, the coordinator had to handle a major change in the consortium. One of the PIs in the consortium and the work package leader of WP4, Zoltan Acs, has left FIRES partner institution (LSE), and transferred his appointment to George Mason University, Washington DC. Efficient and regular communication was of particular importance in this case and the coordinator has been in close contact with the project officer in Brussels as well as with LSE and GMU, trying to find an acceptable solution for this case. Thanks to a frequent and effective communication with LSE, an administrative and budgetary solution was found to ensure that LSE can stay within the project and continue with the work on WP5 with another senior researcher involved in FIRES project. It was decided that the tasks in WP4 will be redistributed between UU and PTE. Detailed explanation on this issue is provided in Section 5.1.

#### Details for each task executed

##### ***Task 1.1 Project management, financial management, and reporting***

At the beginning of the project, a project manager (Ms. Martina Chylkova) was appointed at the coordinating institution (UU) to assist the scientific coordinator with the overall implementation of the project and to ensure a smooth project management. Efficient communication channels have been opened and regular contact was established with all the consortium partners, the advisory board and with the dedicated project officer at the European Commission.

The management structure of the project has been set up and formalized through the Consortium Agreement. As the main decision body, the Executive Board (EB) has been established, where each work package is represented through its coordinator. Important management issues about the research progress or matters that might influence the research are discussed in regular EB meetings.

The pre-financing received by the coordinator in the first months of the project was distributed promptly to all project beneficiaries. Contact was established with the financial and administrative support offices at all partner institutions. In addition to the official reporting to the EC, a six-monthly interim financial reporting was put in practice, as well as an intermediate scientific reporting to monitor the progress made in the work packages. The coordinator is providing continuous support to all partners with regards to the reporting and any other issues that might occur.

##### ***Task 1.2 Quality Assurance***

Assurance of the scientific quality of all FIRES results is of the utmost importance for the project. At the beginning of the project, the Quality Assurance plan was submitted as D1.1 and put into practice. The following quality assurance measures are implemented within the FIRES project:

- *Peer review* for each deliverable executed by two researchers from the consortium. Where possible we aim for at least one of the peer reviewer to be from outside the Work package from the peer-reviewed deliverable. Nevertheless, in a quite small consortium where the WPs are inter-connected and many researchers participate across WPs, this has proved to be quite challenging and slowing down the process. Therefore, the deliverable reviewers are chosen outside of the team working on the deliverable, but not necessarily outside of the WP. Each deliverable is also always reviewed by the project coordinator as the final approving instance. So far, the peer review process proved to be an efficient tool in the quality assurance process.
- *Advisory Board* members are invited to annual consortium meetings. Up to now, there was a strong involvement of one advisory member, in particular, Prof. David Audretsch, who

participated in the Kick-off conference and offered his assistance and inspiration in many other ways. As the project is entering now its second phase, in which more content deliverables will be delivered, the coordinator aims to involve also other AB members more to ensure permanent external feedback.

### ***Task 1.3 Project meetings***

All the meetings that were planned and foreseen in Annex I have been successfully organized. The *Kick-off meeting*, where all the consortium partners participated, was organized by the UU coordination team and took place in Berlin on 2<sup>nd</sup> – 4<sup>th</sup> September 2015. The date of this meeting was a bit later than originally planned (early in Month 4 instead of planned Month 3), as the month of September was more convenient for getting the consortium together. The postponement of the date for the Kick-off meeting contributed to a small delay in submission of the D1.1 Quality assurance plan, and D7.1 the Dissemination plan, as the Executive Board at the Kick-off meeting had to formally approve the final drafts of these documents for submission. However, these small delays had no effect on the overall progress of the project. During the event, most of the researchers from different disciplines met for the first time and discussed intensely the organization and plans for the work packages. The consortium also worked on the Stakeholder engagement strategy and made the first contact with relevant stakeholders. The meeting report was submitted to the EC as deliverable D1.2 and an online event magazine (<http://fires.magg-e.com/>) was distributed to stakeholders and conference participants afterwards for dissemination.

In addition to the full consortium meeting, three *Executive Board (EB) meetings* have been organized since the start of the project (project months 1-12). The EB is composed of the coordinators of each work package and is complemented by the UU shadow board. That is, although formally the (more senior) work package leaders are in charge and responsible, they are all in close contact with and supported by a senior researcher at Utrecht University. This shadow board can meet more frequently and handle minor organisational and administrative things directly. Moreover, it forms a convenient sounding board and first point of communication for the project manager and scientific coordinator. At its formal meetings, the EB is discussing the overall progress and planning of the research, project deliverables, plans, and format of the consortium meetings and conferences, stakeholder engagement strategy, and any challenges and difficulties that might have arisen in any of the work packages. The minutes of all EB meetings are always distributed to EB members after the meeting and are available to the EC upon request.

***Table 2: Project meetings organized during the first reporting period***

<b>Meeting</b>	<b>Host</b>	<b>Location</b>	<b>Date</b>
Executive Board meeting #1	UU	Utrecht	18 June 2015
Kick off meeting and conference	UU	Berlin	2-4 September 2015
Executive Board meeting #2	UU	Berlin	4 September 2015
Executive Board meeting #3	UU	Utrecht	8 April 2015

### *Upcoming meetings:*

Currently, the coordinator is busy with planning and organizing the first annual consortium meeting and stakeholder event that will take place in Utrecht on 12-14 October 2016. The event will be divided into two parts, where first two days will be devoted to the consortium meeting in order to discuss the progress of the project and work further on the stakeholder engagement strategy. On the last day, the consortium will engage with the second group of stakeholders in the open plenary session as well as three focused theme sessions. The detailed program is currently being worked out and the consortium is in the process of reaching out to and inviting the relevant stakeholders. Keynote speakers have been invited for this event and one is already confirmed.

The planning has already started also for the third annual meeting and conference, which is to be organized in Greece, in October 2017 (Month 28 of the project). The date for this event was slightly postponed compared to the proposal (from Month 24) as the October date proved to be more convenient for the consortium and also given the plans for hosting a track at another big conference in September 2017 (WINNIR2017). The Executive Board has already discussed first ideas and plans for the format of the meeting and the coordinator is already in close contact with beneficiary in Greece (UPRC) that will have a major role in organizing the event. The EB has decided to change the format of the event, from an open conference to a consortium meeting while engaging with other academics through hosting tracks at other big conferences. Please see the detailed reasoning of this change in *Section 5*.

Apart from the annual consortium meetings, the EB will continue to meet at least once in between the annual meetings in person, and when necessary, additional skype meetings are being organized.

**Table 3: List of upcoming annual consortium meetings and conference (updated)**

<b>Meeting</b>	<b>Place</b>	<b>Date</b>
1 <sup>st</sup> annual consortium meeting and stakeholder event	Utrecht, The Netherlands	October 2016 (month 17)
2 <sup>nd</sup> annual consortium meeting	Greece	October 2017 (month 29)
Final consortium meeting and conference	Brussels, Belgium	May 2018 (month 36)

### Use of resources:

#### **WP1**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
<b>1</b>	<b>UU</b>	6,5	4,1*	2,4

\*Detailed explanation on the PMs spent in WP1 is provided in Section 5.2 Use of resources

## **1.2.2 Work package 2**

### Summary of progress towards objectives specified in Annex 1

The core objective of this WP is to analyze the historical roots and evolution of the institutional arrangements that are most relevant to European entrepreneurial ecosystems and to identify the most important future challenges and opportunities in this respect. Work package 2 is on track regarding all its tasks and deliverables. The first deliverable is expected to be submitted to the EC by the end of July

2016. Milestone 2 was not achieved by its original date (M12) because the deadline for the deliverable to which it was connected (D2.1) has been shifted in the bundling of deliverables in the negotiations over the Grant Agreement. In that process, the milestone was simply not shifted with it. This was an administrative omission that will not affect the progress towards the objectives of the project as significant work on the milestone was done and it will be completed with D2.1 by the end of November 2016 (M18).

#### Details for each task executed

##### ***Task 2.1: The institutional framework for innovation and entrepreneurship***

The purpose of this task is to identify the most important policy areas and measures likely to create a favorable environment for entrepreneurship.

In order to lay the groundwork for this task Selin Dilli (UU) and Niklas Elert (IFN) have finalized a first extensive study “The Diversity of Entrepreneurial Regimes in Europe”. Here is the link to the working paper version (<http://www.ifn.se/eng/publications/wp/2016/1118>). The WP-version has been shortened somewhat and submitted to the *Journal of Institutional Economics*.

The paper argues that one-size-fits-all reform strategies are unlikely to be successful. Reform strategies must be informed by a better knowledge of the varieties of European capitalism and the institutional complementarities that drive these differences. By employing principal component analysis, factor analysis and cluster analysis to examine how 21 European countries and the United States cluster in the entrepreneurial and institutional dimensions, the authors identify six country clusters, or entrepreneurial regimes, with a distinct bundle of entrepreneurial characteristics and institutional attributes.

Although not formally a deliverable, this paper has laid the foundation for the planned study “An institutional framework for innovation and entrepreneurship” by Elert, Henrekson and Stenkula (all at IFN). This study is currently in the preparatory stage and combines deliverable D2.1 and milestone MS2.

Also in preparation of this deliverable, Magnus Henrekson has held two consultation workshops (June 2015 and February 2016) with leading industrialists who have given their views on what institutions they consider crucial for the creation of a favorable ecology for entrepreneurship. The FIRES project has also been described in the IFN Newsletter that reaches more than 4000 subscribers (June 2015), mostly in Sweden.

##### ***Task 2.2: Institutional evolution of finance in Europe and entrepreneurship***

In this task, we identify the most important financial institutions in Europe that facilitate or hamper entrepreneurship and review their historical evolution. The task comprises of two separate deliverables:

Selin Dilli (UU) has presented some very primary ideas and results during a workshop organized by the Sustainable Finance Lab at Utrecht University, 19 November 2015. See for the program: <http://www.uu.nl/en/events/workshop-sustainable-finance>. Deliverable D2.2 will be delivered only in the third year (month 36). We don't foresee any delays.

Luca Grilli and Boris Mrkajic (POLIMI) search for the institutional drivers behind the development of a flourishing venture capital (VC) sector in Europe. With the aim of gaining an on-the-field perspective on the theme, a consultation workshop for stakeholders was held in the Fall 2015 with personnel and analysts from the Italian Ministry of Economic Development, the Italian Union of Chambers, the Italian National Institute of Statistics, CONSOB, (i.e., Public authority responsible for

regulating the Italian financial markets) and Cassa Depositi e Prestiti (one of the most important limited partners in VC funds in Italy). Then, they set up and are currently performing an extensive and deep literature review based on scientific studies in the economics and management literature aiming at identifying those formal and informal institutions, which are found to be conducive to the birth and growth of a VC sector. At the moment, they are inspecting and categorizing these studies. This effort will produce novel results consisting in the systematization of existing but dispersed knowledge on the topic of interest. It will also be instrumental in our views for identifying specific areas of interest where to focus subsequent (empirical) analyses. This literature review and its results will flow into a working paper (that they have already started to write) and will be completed in the summer of 2016 and presented at the FIRES-track in the IECER2016 conference in September 2016. The final deliverable is due only in month 30 and no delays are foreseen.

***Task 2.3: The institutional evolution of knowledge creation in Europe and entrepreneurship***

In this task, we will identify the most important institutions that hamper or favor knowledge circulation, and analyze them historically. Work in this task will also benefit from the groundwork laid in Task 2.1 and in January 2016 a meeting of researchers Selin Dilli (UU), Gerarda Westerhuis (UU) and Claire Economidou (UPR) involved in D2.4 took place in Utrecht, kicking off work on this deliverable. Work has now started and D2.4 will be delivered at the end of the second year (month 22). We do not foresee any delays.

***Task 2.4: Institutional evolution of labor markets in Europe and entrepreneurship***

This task aims to bridge the gap between history and the future, connecting the more historical analysis in this work package with the forward-looking reform proposals in later work packages. Selin Dilli (UU) has completed a draft version of the paper “The Diversity of Labor Market Institutions and Entrepreneurship in Europe and the U.S.: Past and Present”. The paper was presented at the IWH Workshop on Entrepreneurship and the Labor Market in Halle (<http://www.iwh-halle.de/d/start/News/workshops/2016/20160422/Call.pdf>) in late April 2016. A revised version of that paper will be submitted to Socio-Economic Review and as deliverable D2.5 on schedule to the EC in July 2016.

Moreover, in this Task Gerarda Westerhuis (UU) and Selin Dilli (UU) are doing joint work focusing on the Netherlands and the U.S. as case studies based on a qualitative approach. This is work in progress and was presented at a business history conference in Berlin at the end of May 2016 ([http://www.unternehmensgeschichte.de/?seite=abh\\_registration](http://www.unternehmensgeschichte.de/?seite=abh_registration)).

***Task 2.5 Megatrends and the transition from a managed to an entrepreneurial economy in Europe***

This task aims to describe the trends and developments, which will influence future societal and economic developments relevant for FIRES. These foreseeable trends may interact and affect the effectiveness of institutional reforms in Europe studied in FIRES. This task and deliverable is led by Axel Marx (KUL) and has three aims:

1. to map these megatrends on the basis of existing studies by several international organizations and research institutes.
2. to select the megatrends with significant impact on knowledge institutions, financial institutions and welfare institutions influencing entrepreneurship and the creation of an entrepreneurial economy.
3. to identify the crucial challenges resulting from these megatrends for institutional reform.

In the first months, Axel Marx, Philip De Man and Ward Munsters (KUL) have mapped and discussed the megatrends on the basis of 15 existing studies. A working document/report was prepared for this

purpose. In the remaining months, the researchers involved will further identify megatrends that are especially relevant for FIRES and select megatrends with significant impact on knowledge, financial and labor institutions. These will be further discussed and analyzed, resulting in a manuscript to be submitted to a peer-reviewed journal and as deliverable D2.7 by month 24 (June 2017) without delay.

As an additional deliverable in this work package Magnus Henrekson (IFN) and Tino Sanandaji (Stockholm School of Economics) have updated their database on billionaire entrepreneurs and outlined their study where they will document differences in superentrepreneurship among EU member countries and in EU relative to the U.S: and Asian countries. The identified empirical patterns will then be explained by various institutional factors with the purpose of trying to identify the key policy changes that could enhance superentrepreneurship in Europe. At this point, it is not clear if the submission for review to a peer-reviewed journal of the resulting manuscript is already opportune by month 18 (November 2016), but the manuscript will be submitted to the EC as deliverable D2.6 without delay.

Use of resources:

#### **WP2**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
<b>1,0</b>	<b>UU</b>	30,3	14,4	15,9
<b>2,0</b>	<b>KUL</b>	8,5	2,8	5,8
<b>3,0</b>	<b>FSUJ</b>	0,5	0,0	0,5
<b>4,0</b>	<b>UPRC</b>	0,1	0,0	0,1
<b>5,0</b>	<b>PTE</b>	0,0	0,0	0,0
<b>6,0</b>	<b>POLIMI</b>	22,0	1,8	20,3
<b>7,0</b>	<b>IST</b>	0,0	0,0	0,0
<b>8,0</b>	<b>IFN</b>	14,6	4,0	10,6
<b>9,0</b>	<b>LSE</b>	0,0	0,0	0,0
	<b>Total</b>	<b>76,0</b>	<b>22,9</b>	<b>53,1</b>

\*Additional 0,58 PMs was reported in subcontracting

### **1.2.3 Work package 3**

#### Summary of progress towards objectives specified in Annex 1

The tasks in work package 3 are all geared towards obtaining new evidence and a better understanding of the effects of entrepreneurship, institutions and structural change on growth in the EU. In particular, this work package aims to identify and analyse how entrepreneurship and institutions drive related variety at national and regional (NUTS2) levels and how, in turn, related variety, entrepreneurship and institutions affect national and regional growth and new value creation. The desirability of the transition towards a more entrepreneurial society will be established by analysing the ways in which entrepreneurial processes foster inclusive, sustainable growth in the EU. These include new job creation, better governance, alternative opportunities for outsiders on the labour market, non-monetary rewards from entrepreneurship and effectuating knowledge spillovers in the economy.

The work on all deliverables of this work package is currently on schedule. Two tasks have been completed on time:

- D3.1 (“A review paper from task 3.1 on indicators and growth effects of related variety at the national and regional level in the EU”) showed that most of the available studies find support for the

hypothesis that related variety supports regional employment growth. Those who looked at inter-industry differences found that the effects of related variety on growth may be specific to certain industries only, especially knowledge-intensive ones.

- D3.2 (“Pan-European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and tasks“) is a report that collects, identifies and describes the data sources and their availability as well as descriptive statistics for a database that was compiled to assess the empirical relationship between related variety and entrepreneurship at the NUTS2 level.

Work in work package 3 is progressing as planned.

#### Details for each task executed

#### ***Task 3.1: A review of the literature on the effects of related variety on growth at the national and regional level***

UU has delivered a survey on related variety and economic growth in February (as deliverable D3.1 ‘A review paper from task 3.1 on indicators and growth effects of related variety at the national and regional level in the EU’) according to the plan.

#### ***Task 3.2: Construction of pan-European database at national and regional (NUTS2) levels including sectoral data, product data, task data and derived indicators of relatedness (UU)***

*D3.2: Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and tasks [12]*

UU has collected all possible data on industry composition, entrepreneurship, and regional growth. In particular, datasets based on Amadeus (Bureau van Dijk), the Global Entrepreneurship Monitor as well as more detailed country-level datasets have compiled and explored. With this deliverable, we have also achieved Milestone 3 as planned. The data are now ready for more sophisticated statistical analyses. Work on that is progressing as planned towards Task 3.4 and deliverable D3.4 (see below).

#### ***Task 3.3: Empirical analysis of drivers of related variety at national and regional level in EU***

Intensive empirical analysis of the database delivered end of May 2016 (Task 3.2) is about to start in June 2016. Some preliminary analyses have already been conducted. Consultation workshops for stakeholders, a Round Table, and a manuscript to be submitted to a peer-reviewed journal will be based on the empirical analysis. The deliverable connected to this Task is due in month 36 and we foresee no delays.

#### ***Task 3.4: Empirical analysis of the effects of related variety at national and regional level in EU***

*D3.4: Empirical analysis of the effects of related variety at the national and regional level in the EU. Based on the empirical analysis a manuscript will be prepared and submitted to peer reviewed journal.*

The first analyses have been presented at relevant conferences, in particular, the 4th Global Conference on Economic Geography at the University of Oxford in August 2015 (Frenken) as well as 3rd Geography of Innovation Conference at the University of Toulouse (Frenken, Content).

Dr. Frank Neffke (Centre for International Development at Harvard University) is visiting UU during April-June 2016 to work on a theoretical model of economic development based on related variety using percolation theory. That theoretical work will provide a strong basis for the empirical analysis to be performed in this Task. Deliverable D3.4 will be completed in month 34.

### ***Task 3.5: Patterns in global trade and EU labour markets***

*D3.5: Report on patterns in global trade and EU labour markets based on topics outlined in tasks 3.6-3.8 and 3.9. Based on the report manuscript will be prepared and submitted to peer-reviewed journal*

The data collection underpinning the empirical analysis has been completed. Researchers in the team are making progress with the economic analysis. The report that will consist of an empirical and theoretical component will be submitted in November 2016. A manuscript based on this report will be submitted to a peer-reviewed journal by that date. We do not foresee any delays in this deliverable.

The stakeholder consultation workshop that had been initially planned as part of D3.5 has been moved to D3.6 since both topics are closely related and initial contacts suggest a lot more interest from stakeholders to interact on issues that fit better into D3.6.

### ***Task 3.6: New job creation and entrepreneurship***

*D3.6: Manuscript submitted to peer-reviewed journal based on the Report on New job creation and entrepreneurship. Consultation workshop for stakeholders and Policy Brief on studies outlined in tasks 3.6-3.8-9 as well as Round Table on entrepreneurship and inclusive growth in Europe will be included*

A researcher, Karen Geurts (KUL) was hired for working on the report that will be the deliverable of this task. A first draft has been completed and circulated for feedback. A summary of the preliminary results has been written up targeted to a lay audience and it was published in a Belgian practitioner's journal on labour market policy. This journal is edited by a publicly funded think tank and aims to inform policy makers and the wider professional audience active in shaping labour market policies in Belgium. A report of the results will be completed in August or September 2016. At the same time, a manuscript will be submitted to a peer-reviewed journal well ahead of time for submitting deliverable D3.6 in month 36 (June 2018). A stakeholder consultation workshop is being prepared for the summer of 2016 and the round table for policy makers completes this deliverable in May of 2018.

### ***Task 3.7: Social and corporate responsibility and governance in young SMEs.***

*D3.7: Policy Brief on studies outlined in tasks 3.7, Consultation workshop for stakeholders on topics outlined in tasks 3.7, Manuscript submitted to peer-reviewed journal based on the Report*

An intern has started work on collecting and summarizing the relevant literature. Related to this task an experiment with 48 subjects was conducted at the Future of the Internet conference in Hamburg (<http://www.ecfi.eu/>) in November of 2015 and the data show that entrepreneurs at that conference have relatively strong social preferences and a high willingness to contribute to public goods. A follow-up experiment at tech Open Air in Berlin (<http://toa.berlin/>) is planned for July 2016 to confirm these patterns and compare subject groups. A stakeholder consultation workshop is being prepared for the fall of 2016. Recruiting of the postdoc to be responsible for the deliverable is in progress and we aim to hire a suitable candidate in the Fall of 2016. The full deliverable is due in month 26 and we expect no delays.

### ***Task 3.8: Entrepreneurship and inclusive growth in EU***

*D3.8: Manuscript submitted to peer-reviewed journal based on the Report Entrepreneurship and inclusive growth in EU*

Questionnaires have been sent out to all private sector companies founded (by entrepreneurs aged 50 or more) between 2004 and 2009 in Portugal. The company contacts were obtained from the Gabinete de Estudos e Estratégia (GEE) at the Ministry of Economy. We have received 208 valid responses

from “senior entrepreneurs” and we have prepared a document describing the quantitative and qualitative data obtained.

The variables analysed in the study are related to the following concepts:

- Human capital (Becker 1968, Bosma et al. 2004, Unger et al. 2011);
- Pecuniary and non-pecuniary incentives (Parker 2009; Say and Patrickson 2012; Amorós and Bosma 2013);
- Motivations and satisfaction with the company (in line with the approach adopted by Block & Koellinger 2009).

So far these results are used to identify patterns and develop a theory on the topic (rather than performing a confirmatory analysis). Finally, we aim to use secondary data (matched employer-employee data) and perform a deductive/confirmatory analysis. This analysis will focus on the performance of senior vs. young entrepreneurs’ companies.

### ***Task 3.9 Institutions, entrepreneurship, and wellbeing.***

*D3.9: Manuscript submitted to peer-reviewed journal based on Report Institutions, entrepreneurship, and wellbeing. Round Table on entrepreneurship and sustainable growth in Europe.*

The main questions that are addressed in this task are

- In how far does an entrepreneurial “income puzzle” (i.e., lower average incomes in self-employment as compared to dependent employment) exist?
- What are the main reasons for lower incomes in self-employment? What may compensate for lower incomes in self-employment?

The main data source of the analysis used so far is the representative data of the German Micro-Census, a survey of 800,000 individuals, which allowed us to look deeply inside the subgroups of entrepreneurs and paid employees, in order to investigate, for whom the income differences persist and who earns higher incomes than comparable self-employed. We arrived at a conclusion that a common assertion that entrepreneurship does not pay does not hold for the case of Germany. The self-employed with employees have, from the 25th percentile of the income distribution and up, higher expected incomes per hour than comparable paid employees. In contrast, the solo self-employed are on average less likely to earn more than their paid employee counterparts, explaining the largest part of the often discussed negative income gap in entrepreneurship. There are, however, high-earners among solo self-employed who realize higher incomes than comparable paid employees. Those high-earning solo self-employed may serve as role models for other solo self-employed who persist in spite of low rewards. Non-pecuniary benefits are likely to arise from flexible working times when being solo self-employed that allow pursuing family-related obligations.

Future work will analyse such non-pecuniary benefits of self-employment such as greater autonomy and self-realization, flexible work hours, and health issues. We are planning to perform such analyses on the basis of household panels (German Socio-Economic Panel, European Household Panel) that provide more detailed information on such issues but suffer, however, from much lower numbers of observations.

Intensive work on the task has begun in October 2015 and main results can be presented in October 2016. A report will be finalized at the end of 2016 and a manuscript based on this report will be submitted to a peer-reviewed journal in early 2017. A roundtable discussion with policy makers at the concluding event in Brussels completes this deliverable due in month 36.

### ***Task 3.10: Knowledge creation and diffusion and entrepreneurship in EU***

#### *D3.10: Entrepreneurship and innovation - Report based on the study outlined in task 3.10*

This task examines the relationship between innovation activity and entrepreneurial activity. To study such relationship, we first investigate where the innovation is concentrated in space. We use various metrics of innovation activity such as the number of patent applications (and patent grants) by assignee and inventor, the number of citations that each patent receives, the number of patent inventors, the number of scientists, the number of universities and research institutions among other factors both at the country and region level. With such metrics, which have already been constructed, we are able to get a good idea about the spatial aspects of innovation landscape in Europe. We will then study the flows related to innovation across regions and countries. For instance, we have data on patent inventor mobility across countries and potentially across regions. We plan to construct patent citation flows across countries and regions. In this way, we can provide a dynamic rather a static map of the innovation landscape, so one can see the development of a country/region in terms of innovation activity and its concentrations and trends over time.

Using newly constructed data on entrepreneurial activity by region (Tasks 3.1 and 3.2), we will then be able to map the innovation and entrepreneurial activity in Europe and whether there is a tendency for them to move together over time. Last, and most important, we would like to disentangle when an innovator actually becomes an entrepreneur, i.e., commercializing its innovative idea and making a profit. In doing so, we bring another piece of information into the innovation-entrepreneurship relationship that of trademark data, and examine whether high innovation/entrepreneurship activity is also accompanied by high application (use) of trademarks.

Intensive work on the task has begun in January 2016. First results can be presented in October 2016 at the consortium meeting in Utrecht.

#### Deviations from Annex 1

Only minor deviations have occurred. A stakeholder consultation workshop was shifted from D3.5 to D3.6 after realising there was more interest in the topic of the latter.

#### Clearly significant results

The review of the literature on the effects of related variety on growth at the national and regional level (**deliverable 3.1**) has shown that most studies find support for the initial hypothesis by Frenken et al. (2007) that related variety supports regional employment growth. Those who looked at inter-industry differences found that the effects of related variety on growth may be specific to certain industries only, especially knowledge-intensive ones. Concerning the studies looking how regions develop new industries, it was also found that if a region or countries already host industries that are related to a specific industry, it is much more likely to become specialized in that industry.

The ongoing analysis of new job creation and entrepreneurship (**deliverable 3.6**) has found that de novo entrants occur in a very narrow range of size classes and that larger entries are likely to show higher growth.

Ongoing research on corporate social responsibility and entrepreneurship (**deliverable 3.7**) has found that entrepreneurs are more inclined to cooperate in public goods games and are more generous in ultimatum games compared to other subject groups (e.g. students) in a lab setting. These results need to be confirmed in another entrepreneurial subject pool and analysed with more statistical rigour.

Ongoing research on entrepreneurship and inclusive growth in EU (**deliverable 3.8**) has found that older individuals

- perceive non-pecuniary motivations as more important than pecuniary motivations to engage in entrepreneurship.
- perceive active ageing as more important than other non-pecuniary motivations to engage in entrepreneurship.
- start a business mainly out of opportunity rather than out of necessity.
- perceive active ageing as more important than other non-pecuniary outcomes to entrepreneurial satisfaction.

Ongoing research on institutions, entrepreneurship, and wellbeing (**deliverable 3.9**) has found that the common assertion that entrepreneurship does not pay does not hold for the case of Germany. In particular:

- Self-employed with employees have, from the 25th percentile of the income distribution and on up, higher expected incomes per hour than comparable paid employees.
- Solo self-employed are on average less likely to earn more than their paid employed counterparts, explaining the largest part of the often discussed negative income gap in entrepreneurship. There are, however, high-earners among solo self-employed who realize higher incomes than comparable paid employees.
- Non-pecuniary benefits are likely to arise from flexible working times when being solo self-employed allows the pursuit of family-related obligations.

Use of resources:

### WP3

Partner Number	Partner Name	PMs planned	PMs spent in RP1	PMs remaining
1,0	UU	39,3	11,6	27,7
2,0	KUL	12,5	2,2	10,3
3,0	FSUJ	10,0	6,0	4,0
4,0	UPRC	8,7	0,0	8,7
5,0	PTE	0,0	0,0	0,0
6,0	POLIMI	0,0	0,0	0,0
7,0	IST	4,0	0,0	4,0
8,0	IFN	0,0	0,0	0,0
9,0	LSE	0,0	0,0	0,0
	<b>Total</b>	<b>74,5</b>	<b>19,8</b>	<b>54,7</b>

## 1.2.4 Work package 4

Summary of progress towards objectives specified in Annex 1

The overall purpose of the work package is to develop the tools to assess the quality of the entrepreneurial ecosystems in the EU. An effective tool for making such evaluations is key in designing effective policy proposals and monitoring progress. Starting point in this work package is the Global Entrepreneurship and Development Index (GEDI), that offers a validated methodology for making such assessments. The index, however, was originally developed for all countries in the world and the choice of underlying variables was greatly restricted by data availability. For the European Member states more, better quality and longer time series are available for many more variables. In addition, a lot of the relevant information can also be collected at sub-national and regional levels. To

make the GEDI methodology suitable for our purposes, several adjustments, updates, and changes to the index were therefore proposed in this work package. The work was divided into six subtasks. Work on all tasks is progressing, though organizational issues have caused some delays. These are discussed below in detail. The reason for the delays is twofold. First, the work package leader, Prof. Zoltan Acs, left his position at London School of Economics (LSE) in December 2015. This made it impossible to hire a research assistant through LSE and plans had to be adjusted. Second, it proved impossible to hire the foreseen Ph.D. at Utrecht University (UU) for the budgeted 18 PMs in work package 4. These complications implied we had to shift work and resources, which took a significant amount of time. We have now shifted some of the work and resources to Pecs University, where much of the data collection and the GMR modelling work was to be done anyway. The resources and work at UU have been redistributed to Dr. Niels Bosma and Mr. Jeroen Content, the Ph.D. student active in WP3. This combination makes sense because there is some overlap in the data collection at the regional level and Dr. Bosma is the expert on regional entrepreneurship data. The work package leader is now seconded from his employer (George Mason University, Washington D.C.) to UU for the duration of the project. As work package leader he will thus be able to liaison between Pecs and Utrecht University to keep progress in the work package on track.

#### Details for each task executed

##### ***Task 4.1: Developing a time series of GEDI for the European Members States***

Despite organizational issues, progress towards the objectives of the work package has been made in identifying weaknesses in the original GEDI. In D4.1 an inventory of these potential improvements was made and data (sources) have been proposed, evaluated and collected to improve the GEDI. This deliverable was joint work between LSE and UPC. Submission of this deliverable was slightly delayed because useful comments and suggestions raised in the internal reviewing process took more time than was available. The deliverable was delayed by a month. Milestone 4 (A Pan-European database with time series for GEDI) was originally planned for delivery in month 12, but although work has started on this milestone, the extended time series of GEDI scores for EU member states and underlying data is not yet available for analysis at UU. The above described organizational issues caused delays in lining up the essential junior research capacity towards achieving this milestone. By now arrangements have been made and work is progressing. It is expected that by the end of July the data is delivered and the Milestone will be achieved. Variables on e.g. taxes, labour markets and knowledge institutions have been collected and added and the time series can be updated. The limiting factor on pushing the data back into the past is the data on entrepreneurial activity. As GEDI relies on the Global Entrepreneurship Monitor (GEM) the data cannot be pushed back beyond 2000 for most EU member states. The deliverable and the milestone together cover task 4.1. Work has started in December 2015 but got delayed. It is expected that the time series data will be collected, documented and transferred for analysis to UU in month 14, July 2016.

##### ***Task 4.2: Time series and panel data analysis of GEDI and growth performance indicators***

The above will cause some delay also in the start of work on Task 4.2. Those involved in that task, however, are currently working hard to provide the entrepreneurship data at the regional level (also for deliverables in WP3) that is also essential in Task 4.3. This data collection effort has been reported in D3.2 but also is highly relevant for work package 4 (Tasks 4.3 and 4.4).

##### ***Task 4.3: Assessing Europe's entrepreneurial ecosystems at a regional level***

We expect that the Utrecht team can provide the essential regional entrepreneurship data, that is a key input for milestone 5 by the end of June 2016. The PTE team has taken over responsibility for delivering the pan-European REDI-database that is milestone 5 in this task, originally foreseen for month 18 (November 2016). The report describing the REDI-database is deliverable D4.4 and planned for month 24 after bundling. The milestone may be delayed somewhat but will certainly be achieved by January 2017 and the report in D4.4 will be delivered on time in May 2017.

***Task 4.4: Cross-sectional analysis of REDI and regional growth performance measures***

Work on task 4.4 has not started yet. As the same people that were involved in the data collection for D3.2 and D4.4 last year will be working on the analysis that follows, we anticipate the work in the second part of the project will progress according to plan.

***Task 4.5: GMR model for Europe linking Entrepreneurship, Institutions, and Growth***

Work on task 4.5, the GMR model simulations, will start with the hiring of a research assistant at Pecs University in October 2016. This research assistant will work together with Prof. Acs and the participants at Pecs to prepare for the extension of the model and start collecting the required data for accurate calibration. The related deliverable (D4.6) is foreseen for month 36 of the project (May 2018) and we foresee no delays at this point.

Clearly significant results

In this work package, only one deliverable was due in the first 12 months of the project. This deliverable consists of a report that outlines how the GEDI-indicator can be extended using additional data on taxes and labour market institutions, on finance and on knowledge flows. The deliverable then gives an inventory of data and sources that can be used to make such extensions to the GEDI at the members state level over the period under study. Of course, the partners have looked for these data, but also obtained, collected and prepared them for use. This work was done primarily in Pecs under the direct supervision of prof. Acs.

The partners involved in Utrecht were not yet planned to have submitted any deliverables. So far their work on the future deliverables has mostly been the collection and curating of the data underlying the REDI-indicators. That is, the entrepreneurship data at the regional level, that still had to be aggregated to obtain sufficiently representative samples at higher geographical resolution. As new data from the Global Entrepreneurship Monitor became available, it was decided that updating the regional dataset and compiling a second cross section with average entrepreneurship rates over five-year periods was worth the effort. Matching institutional data at the regional level is available from Eurostat and this work will result in the indicators being compiled for 20 European member states over the period 2005-2015 and a much larger number (150) of NUTS1 and 2 regions for 7-year cross sections for 2007-2014.

Deviations from Annex I

D4.1 was submitted a month behind the schedule. This was due to organizational issues (fully described in section 5) that have delayed the start of the work. The first draft for the deliverable was submitted on time but required revisions took more time than expected resulting in 1 month delay on submission.

Use of resources

**WP4**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
<b>1,0</b>	<b>UU</b>	18,5	1,8	16,7
<b>2,0</b>	<b>KUL</b>	0,0	0,0	0,0
<b>3,0</b>	<b>FSUJ</b>	1,0	0,0	1,0
<b>4,0</b>	<b>UPRC</b>	0,0	0,0	0,0
<b>5,0</b>	<b>PTE</b>	17,0	6,8	10,2
<b>6,0</b>	<b>POLIMI</b>	0,0	0,0	0,0
<b>7,0</b>	<b>IST</b>	0,0	0,0	0,0
<b>8,0</b>	<b>IFN</b>	0,0	0,0	0,0
<b>9,0</b>	<b>LSE</b>	18,5	0,2	18,3
	<b>Total</b>	<b>55,0</b>	<b>8,9</b>	<b>46,1</b>

### 1.2.5 Work package 5

#### Summary of progress towards objectives specified in Annex 1

WP5's core objective is to illustrate the usefulness of our approach in working out a reform strategy for three member states (representing three distinct institutional families) in full detail thereby identifying the opportunities for, and limits to, entrepreneurship policies in Europe. Following up on the insights gained in the previous WPs, we will ask: Which institutional reforms would successfully promote entrepreneurial activity in different institutional settings? To address this question, we subdivided this work package into 5 tasks:

- 1) Collecting internationally comparable data on start-up processes in Germany, Italy, the UK and the US.
- 2) Reveal country-specific typologies of start-up processes using sequence analysis.
- 3) Analysing the impact of institutions on start-up processes in Germany, Italy, the UK, and the US.
- 4) Collecting case studies on creating, developing and funding entrepreneurship in Europe.
- 5) Formulating a country-specific institutional reform strategy for Germany, Italy, and the UK.

Progress has been made to achieve each of the first four objectives, with the fifth depending on the completion of the four previous ones:

On 1) The sample for this study has been drawn from the Orbis database, which provides internationally comparable company profiles. A rigorous catalogue of selection criteria has been developed and applied to ensure a representative sample. In order to enable the completion of overall 800 interviews in Germany, the US, the UK, and Italy, the international call center IFF has been contracted after a thorough selection process. Interviewers have been instructed, both in person and via phone, by the WP coordinator, Andrea Herrmann (UU) and the employed Ph.D. student, Lukas Held, to ensure a consistent data collection process. After a slow start, due to intense feedback, the data collection rate is now up to speed and 100 interviews of good quality have been completed. Hence, data collection in Germany is close to completion.

On 2) Both the WP coordinator and, in particular, the PhD student employed on the WP provide detailed feedback for each interview to the interviewers of the call centre in order to (I) clean the data while it is collected, (II) make sure that the interviews are of sufficient quality, and (III) learn about venture creation processes in the respective countries. Thanks to this feedback, the WP leader and the Ph.D. student gain in-depth qualitative insights into country-specific typologies of start-up processes.

These are essential for the future sequence analyses to be conducted. Some preliminary sequence analyses that have been run on available data illustrate that country-specific venture creation processes can, indeed, be identified. Large-scale sequence analyses have not yet been conducted.

3) By listening to interviews (with an average duration of 60 minutes), the WP leader and Ph.D. student have gained a thorough qualitative understanding of the impact of institutions on start-up processes in Germany and the US. Systematic quantitative analyses have not yet been conducted to this end.

4) Overall, the case studies to be completed within the framework of WP5 are developing well (see table task 5.3 below for details).

5) As foreseen the research in all work packages has not yet reached a stage where country-specific institutional reform strategies could be formulated. The discussion on such reform proposals, however, has been opened and will be the main subject of discussion at the consortium meeting planned for October 2016 in Utrecht.

#### Details for each task executed

In line with the abovementioned objectives of this work package, five major tasks are currently being completed.

#### ***Task 5.1: Internationally comparative dataset on start-up processes and their institutional foundations in Germany, Italy***

Thanks to an earlier Marie Curie project in this research field (Herrmann 2010), a database of 400 start-up processes and their institutional foundations in Germany (210 cases) and the US (160 cases) already existed. To enable quantitative results, WP5's first task consists of expanding this database in such a way that it contains information on 300 start-up processes in Germany, Italy, the UK and the US (i.e. a total of 1,200 cases). Data, therefore, needs to be collected for 830 start-up processes: 90 in Germany, 140 in the US, and 300 in both Italy and the UK.

To date, 100 interviews with German founders have been completed in cooperation with 3 German interviewers of the call centre IFF. This data has been reviewed and cleaned by the WP coordinator and, in particular, the Ph.D. student employed on WP5. The interviewers for the data collection in the UK and the US have been trained and have already conducted trial interviews with US companies. Interviews in the UK and Italy have not yet been conducted but contacts have been made. Progress towards this task and the connected milestone 6, foreseen for month 24 is on schedule.

#### ***Task 5.2: Sequence analyses to reveal country-specific typologies of start-up processes and their institutional foundations***

The second task to be completed consists of analysing the data collected. Obviously, the work can only start in earnest once Task 5.1 is completed (in milestone 6 foreseen for month 24). To illustrate how entrepreneurial start-up processes unfold over time and identify their institutional foundations, we will use sequence analyses (SA). In particular, our analyses will test the hypothesis that entrepreneurship policies need to be complementary to a country's institutional environment in order to be effective. In line with the Varieties-of-Capitalism literature, we will focus our analyses on a country's labour and financial-market institutions, as well as on the institutions governing knowledge creation and business cooperation.

Thanks to the qualitative information gained from listening to interviews with the aim of data cleaning, first insights have been gained about how country-specific typologies of start-up processes

look like in Germany and the US. Preliminary sequence analyses have been conducted on the available data including Germany (300 cases) and the US (160 cases), which indicate that venture creation processes do, indeed, differ significantly between (these) countries.

**Task 5.3: Case studies in creating, growing and funding entrepreneurship in Europe**

To gain an in-depth understanding of the link between entrepreneurial support programmes, their complementarity with national institutions and the distinct characteristics of entrepreneurial ecosystems, the third step will consist of completing country-specific case studies. A list of these case studies, as well as the researchers responsible for completing them, is provided in the table below.

**Table 4: List of WP5 case studies**

5.3.1	<p><u>An evaluation of Italy's YIC programme.</u></p> <p>By taking advantage of the Italian Start-up Act (L. 221/2012), the case study has built a new hand-collected longitudinal database which contains secondary-sourced information on a large sample of Italian young innovative companies (YICs). An econometric analysis has been conducted about the effectiveness of the specific policy instruments envisaged in the aforementioned Italian program on easing YICs' access to external sources of financing. Specifically, the study investigated the possible existence of interrelationships between firm access to government-guaranteed (GG) bank loan programs and fiscal incentives for venture capital (VC) investment. Preliminary results have been condensed into one working paper which is under preparation and will soon become available.</p>	POL
5.3.2	<p><u>An evaluation of London's crowd funding system</u></p> <p>The case study, focusing on equity crowdfunding, has been completed. The study explores the impact of regulatory changes on the funding of early stage ventures with a particular focus on London as an agglomeration in terms of finance and technology.</p> <p>Empirically, the study is based on desk research and interviews with the heads of the two major UK equity crowdfunding firms (Crowdcube and Seedrs) as well representatives of Nesta and the regulator.</p>	LSE
5.3.3	<p><u>An evaluation of Dutch solo-self employment</u></p> <p>The case study on Dutch solo self-employment has been completed. The study highlights how an increase in the fiscal advantages offered by the Dutch government to self-employed persons has led to a raise of self-employment over the past decade, but not triggered higher rates of innovative entrepreneurship.</p>	UU
5.3.4	<p><u>An evaluation of Swedish intrapreneurship</u></p> <p>This joint study by Erik Stam and Mikael Stenkula (IFN), comparing the Netherlands and Sweden, is going according to plan. The study has been planned and outlined in detail during the month of April 2016.</p>	IFN
5.3.5	<p><u>An evaluation of German Entrepreneurial ALM</u></p> <p>The case study is proceeding well: The current literature on the active labor market policy (ALMP) in Germany has been reviewed, with a special focus on the</p>	FSUJ

	development of entrepreneurial support programs. The aim of the report is to draw a detailed overview about the current instruments of the ALMP, its development and efficiency at the macro- and micro-level. Main instruments analyzed are the bridging allowance (BA) and start-up subsidies (SUS) that are targeted to unemployed people. The report will be delivered on schedule in the summer of 2016.	
5.3.6	<p><u>An evaluation of Greek Philanthropy</u></p> <p>This case study, focusing on the institutional foundations and consequences on entrepreneurship of Greek philanthropic institutions, is in preparation. The study approaches ‘philanthropy’ from a different angle than it is conventionally done: Philanthropy is not understood as offering finance, but as offering solutions to problems in order to create sustainable, thriving businesses in communities with high need.</p>	UPRC
5.3.7	<p><u>An evaluation of the Hungarian new tech entrepreneurial ecosystem</u></p> <p>The case study is in preparation: To gain an in-depth understanding of the distinct characteristics of entrepreneurial ecosystems of Hungarian new tech firms, a country-level expert opinion survey will be conducted. The aim of the survey is to verify (confirm or reject) those assumed institutional factors of entrepreneurial ecosystem that are captured by the REDI index in general. Since the REDI only partially includes new tech entrepreneurial factors, the missing elements need to be identified and added to the REDI based factors; e.g. business and tech incubators, accelerators, pitch events, co-working possibilities, university spinoffs, specific government policies. After reviewing the entrepreneurship ecosystem literature, the model of a new tech entrepreneurial ecosystem will be set up. An expert questionnaire will then be developed to examine the ecosystem by an expert. Experts are selected from the Global Entrepreneurship Monitor expert database. Overall 50+ experts shall be conducted.</p>	PTE
5.3.8	<p><u>Stock Option Taxation and Entrepreneurship in Europe</u></p> <p>Magnus Henrekson (IFN) and Tino Sanandaji (Stockholm School of Economics, SSE) have calculated the effective tax rate of employee stock options for a standardized entrepreneurial case in 22 countries. Their hypothesis is that stock options are a key instrument to remunerate entrepreneurship in innovative firms, and they will explore the extent to which different tax treatment can explain differences in the extent of Schumpeterian entrepreneurship. The study is under way.</p>	IFN
5.3.9	<p><u>An evaluation of Belgian business succession practices</u></p> <p>Research has yet to be initiated in this case study. This is unproblematic in view of the fact that the foreseen number of PMs for this deliverable do not yet require any action to be undertaken in order to meet the deadline in project month 24.</p>	KUL
5.3.10	<p><u>Elderly Entrepreneurship in Portugal</u></p> <p>Work on this case study has started: A thorough literature review on the topic of</p>	IST

	senior entrepreneurship has been conducted and a questionnaire has been sent to all private sector companies founded (by entrepreneurs aged 50 or older) between 2004 and 2009 in Portugal. Overall, 208 valid responses have been obtained from senior entrepreneurs. Based on this data, a paper draft is currently being developed.	
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Work on all case studies has started and by month 12 (June 2016) two case studies have been submitted as D5.2 (Estrin) and D5.3 (Liebregts). These deliverables were submitted on schedule. Three more (Fritsch, Henrekson, and Economidou) are expected to be delivered on time in month 18 (November 2016).

***Task 5.4: The impact of institutions on the process of team formation, finance and know-how acquisition in Germany, Italy, and the US***

On the basis of the data and analyses described in Tasks 5.1-2, we will zoom in on the institutional foundations of new firm formation in specific national institutional contexts. For this task we will zoom in on how labour-market institutions influence the formation of founding teams over time, on how financial-market institutions shape the type and timing of finance acquisition by entrepreneurs, and on how antitrust and IPR regulations determine the extent to which entrepreneurs build know-how individually or in cooperation with company consortia or encompassing industry associations.

Importantly, each paper will identify typologies of team-formation, finance acquisition and, know-how acquisition in each country and highlight their institutional foundations as well as complementary entrepreneurship policies.

Based on the qualitative insights gained from the available data, first patterns start to emerge of how labour-market institutions influence the formation of start-up teams in Germany and the US. As more data come in the analyses will be extended. Systematic qualitative analyses of how financial-market institutions influence the acquisition of financial means, and analyses of how antitrust and IPR regulations determine user-producer interactions, have not yet been conducted.

***Task 5.5: A country-specific agenda for institutional reform to promote Europe's entrepreneurial society***

In order to bring our findings to the attention of policy-makers, the fifth task of WP5 consists of drafting a reform agenda. This agenda consists of policy proposals, which we intend to submit to the respective national Ministries of Economic Affairs as well as to the EU Directorate General Enterprise in Brussels. Based on our scientific analyses, these proposals will indicate which institutional reforms are effective means of stimulating entrepreneurship in the various EU member states under investigation – and which ones are less likely to be successful. Furthermore, it can serve as a basis for analysing the effectiveness of the ‘Entrepreneurship 2020’ Action Plan. Our main objective with this reform agenda is to illustrate how our approach can be usefully applied. Creating a fully developed reform agenda for Germany and Italy illustrates to practitioners in policy making that our approach works and our project provides the tools needed to develop such reform strategies for other member states or even at a regional level.

This task builds upon the insights gained in previous tasks and work packages. In accordance with the work package’s overall schedule, work on this task requires input from the other work packages. The discussion on possible reform proposals and strategies, however, has been started in the consortium and much of the program in our Utrecht Consortium meeting of October 2016 will be dedicated to feed into this deliverable.

### Clearly significant results

- The case study on the institutional foundations of crowd funding in London has been completed successfully and submitted to the EC as deliverable D5.2.
- The case study on solo self-employment in the Netherlands has been completed with success and submitted to the EC as deliverable D5.3.
- All additional case studies of WP5 are proceeding in line with the foreseen deadlines.
- A call centre with the necessary characteristics to complete the required 800 interviews for WP 5 has been selected.
- 100 in-depth interviews on venture creation processes in Germany have been completed. Together with the already existing data, 300 cases are now available for Germany. Data collection in Germany has thus been terminated with success.
- Preliminary sequence analyses on available data for Germany and the US have been conducted.

### Use of resources:

#### **WP5**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
<b>1,0</b>	<b>UU</b>	41,8	15,7	26,1
<b>2,0</b>	<b>KUL</b>	2,5	0,0	2,5
<b>3,0</b>	<b>FSUJ</b>	2,5	0,0	2,5
<b>4,0</b>	<b>UPRC</b>	2,5	0,0	2,5
<b>5,0</b>	<b>PTE</b>	1,0	0,3	0,7
<b>6,0</b>	<b>POLIMI</b>	18,6	1,9	16,7
<b>7,0</b>	<b>IST</b>	2,5	0,8	1,7
<b>8,0</b>	<b>IFN</b>	5,0	0,7	4,3
<b>9,0</b>	<b>LSE</b>	2,5	0,5	2,0
	<b>Total</b>	<b>78,9</b>	<b>19,8</b>	<b>59,1</b>

\* Additional 3 PMs were reported in subcontracting (details further on in Section 5.2.1.)

## **1.2.6 Work package 6**

### Summary of progress towards objectives specified in Annex I

Substantial progress has been made in realising the first objective of the work package, related to the understanding of the various dimensions of entrepreneurship policy as pursued by the manifold actors in the European Union at different levels, ranging from the regional level to the European. This first objective corresponds to the first task and first deliverable of WP6, to be finalised in Month 18 of the project. So far, no delay is expected to occur in realising this, or any of the other objectives of WP6 in time for the stipulated deadlines. As regards the realisation of milestone ‘M8 Entrepreneurship Policy: a multidimensional and multi-level assessment’, the work required for follow-up research in the present and other deliverables has been performed in time.

### Details for each task executed

Given the specific place of the sixth work package in the FIRES project and its close relationship with work packages 4 and 5, the progress achieved so far is exclusively related to the first task of the WP. The other tasks of the work package concern the identification and assessment of the legal implications of the proposed reform agenda (Task 6.2) and the assessment of the political opportunities and constraints of the proposed reform agenda (Task 6.3) and the proposal for a coherent

reform agenda towards the Entrepreneurial Society (Task 6.4). Tasks 2-4 depend on input from WPs 4 and 5 and continue the work done in Task 6.1.

***Task 6.1: Entrepreneurship Policy: a multi-dimensional (coherence) and multi-level assessment (subsidiarity)***

The first task of WP6 is geared towards realising the first objective of the WP as described in the Grant Agreement. This objective is to understand the various dimensions of entrepreneurship policy, *i.e.* a policy area at the intersection of several policy domains (financial, economic, labour market, industrial, etc.) and its current grounding in the international and EU legal and institutional framework (*i.e.* parts of *acquis communautaire* relevant to entrepreneurship policy) relevant to the development of the entrepreneurial society with a specific focus on the division of competences, policy coherence, subsidiarity and multi-level governance. The deadline for realising the deliverable related to this objective is Month 18, at which point a report will be submitted to the European Commission on the work of Task 6.1.

In line with the objective of the first task, the work undertaken in the first year of WP6 has taken the form of desk research of the major policy documents of the EU detailing the Union's current actors and approach to entrepreneurship policy, rounded out with a number of interviews with key experts and stakeholders, complemented with a literature review of both general issues of horizontal coherence and vertical subsidiarity, and specific issues of entrepreneurship policy.

A first, thorough round of research identified the main institutions at EU level dealing with entrepreneurship and linked them with existing policy areas and legislative competences. Subsequently, the research moved on to the second phase, which deals with a mapping exercise of the division of competences in the EU on entrepreneurship, both horizontally and vertically. This work was completed in time for meeting milestone M8, so as to inform and facilitate progress in related tasks and work packages that relied on such a preliminary overview of the players and issues informing current EU entrepreneurship policy.

Considering the complex nature of this task, research at this point was complemented by a number of stakeholder consultations and interviews with officials of the EU. For the horizontal mapping exercise, the WP coordinator, along with the UU partner of the project, engaged in a stakeholder consultation with three representatives of the DG of the European Commission responsible for entrepreneurship and SMEs (DG GROW). The consultation consisted of a presentation of the objectives of the FIRES project, in general, and of WP6 in particular, followed by an interview that was aimed at identifying the most relevant actors and institutions at the EU level for the aims of the project. The coordinator submitted a report on the contents of the D6.1 Consultation workshop for stakeholders on topics outlined in tasks 6.1-6.3 in October 2015.

Based on the findings of this stakeholder consultation, and corresponding desk research with a similar outcome, work has since focused on the regulation and promotion of bottom-up initiatives at the regional (local) level. This focus on EU support for fostering local entrepreneurship has allowed the researchers of Task 6.1 to combine the horizontal and vertical mapping exercise, by singling out those actors at EU level with close ties to the regions in Europe (DG REGIO, Committee of the Regions, European Regional Development Fund). Subsequently, a number of interviews with officials from these institutions have been carried out, which, in turn, gave further guidance to the desk research for Task 6.1. Issues singled out for future investigation on the basis of these interviews include the implementation of the Small Business Act at the regional level as a means of increasing coherence throughout Europe's regions.

Furthermore, questions for interviews have been sent out to a select number of high-profile contact

persons in the European Commission and Member States intimately familiar with issues of horizontal and vertical coherence in entrepreneurship matters, including the EASME Head of Entrepreneurship, the DG GROW Head of Social economy and entrepreneurship, and relevant representatives of EU Member States acting as SME Envoys for matters of Entrepreneurship and the States of Belgium, Germany and Italy.

***Task 6.2: Identification and assessment of the legal implications of the proposed reform agenda***

Work on this task can only start as planned upon completion of D5.5. Of course, the discussion on the reform agenda will start before this and already in October 2016 the Consortium will meet in Utrecht to flesh out a first rough and preliminary reform agenda. This will allow the researchers at KU Leuven to already start preparations to legally assess these proposals. The legal assessment of the reform proposals is to be submitted as a manuscript to a professional journal by month 30.

***Task 6.3: Assessment of the political opportunities and constraints of the proposed reform agenda***

Similarly, work on this task can only start as planned upon completion of D5.5. Of course, the discussion on the reform agenda will start before this and already in October 2016 the Consortium will meet in Utrecht to flesh out a first rough and preliminary reform agenda. This will allow the researchers at KU Leuven to already start preparations to politically assess these proposals. The political assessment of the reform proposals is to be submitted as a manuscript to a professional journal by month 36.

***Task 6.4: Towards the Entrepreneurial Society: A Coherent Policy Reform Agenda***

Work on this task can only start as planned upon completion of D5.5 and is due for the concluding policy workshop planned for May 2018 in Brussels. The deliverable related to this task (D6.4) consists of a policy brief and presentation thereof at this event and is foreseen to be delivered without delay in month 36.

Clearly significant results

Work is progressing on the draft version of the report to be finalised in time in Month 18 of the project, taking into account internal peer review deadlines preceding this date. Findings of initial interviews with European Commission experts were presented in a report on the relevant consultation workshop with EU stakeholders. In addition, preliminary findings of the work conducted during the first phase of WP6 have been published in the first widely distributed blog post on the FIRES website.

Use of resources

**WP6**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
1	UU	0,1	0,1	0
2	KUL	39,3	11	28,3
3	FSUJ	0	0	0
4	UPRC	0	0	0
5	PTE	0	0	0
6	POLIMI	0	0	0
7	IST	0	0	0
8	IFN	0	0	0
9	LSE	0	0	0
	<b>Total</b>	<b>39,4</b>	<b>11,1</b>	<b>28,3</b>

## 1.2.7 Work package 7

### Summary of progress towards objectives specified in Annex 1

The main purpose of work package 7 is to actively disseminate the information about the project and its results among the target audiences through various outreach activities. This WP is coordinated by Utrecht University but relies on the input and activities of all consortium partners. During the first reporting period, substantial progress has been made toward setting a successful and efficient dissemination procedures and structure.

In the initial part of the project, the focus was especially on starting an effective dissemination structure, mapping the needs of the target audiences and creating the dissemination tools and templates. The work on all tasks has started and is progressing according to the planned timeline. In the first months of the project, we have submitted our first deliverables planned in this work package, D7.1 Dissemination plan, D7.2 Report on corporate identity, D7.3 Project website, D7.4 Project brochure and flyers, D7.5 Preliminary report on dissemination structure. Resources have been invested into a development of the project house style, website and event online magazine, that will serve the project throughout its duration.

The consortium has already executed several activities towards the dissemination, but since the project is still in its first stage and the first deliverables have just been submitted, we expect to be engaging with stakeholders and disseminating the project's scientific and policy relevant results in the remaining two years with increasing intensity.

In the past year, FIRES was present at several entrepreneurship events, vested interest group events, academic events, and policy and practitioner workshops. With 60 tweets, 35 Facebook and LinkedIn posts, 19 news items and 5 blog entries. The first FIRES newsletter published in June 2016, such engagements are reported and communicated broad and wide. Table 5 below provides a full list of dissemination activities in the first reporting period.

### Details for each task executed

#### ***Task 7.1: Dissemination plan***

The main focus of the dissemination strategy is ensuring that the project results are fed into policy-making processes at both national and European level. At the outset of the project, the dissemination plan was prepared and submitted as a deliverable D7.1 to the EC. Progress has been made also with respect to the proposed dissemination channels in this plan.

#### ***Task 7.2: Set up dissemination structure***

A design of the project newsletter has been finalized and first regular newsletter updating on the progress of the project has been published beginning of June 2016. Although this is the first newsletter on progress updates, in October 2015, we have also published an online [event magazine](#) reporting on the Kick-off meeting in an appealing online format. At the outset of the project, as part of the preparation for the Kick-off meeting, we started to build a database with key stakeholders, for which the input was received from all the consortium partners.

To enhance the dissemination of information about the project and its objectives, we have designed flyers, brochures, and banners. These serve to promote the project at events the consortium partners attend and organize. The dissemination strategy has been an important part of the agenda at the Consortium and Executive board meetings, so far.

#### ***Task 7.3: Development of corporate identity***

This task has been completed and the report was submitted as a D7.2. The corporate identity includes an original project logo, the development of a basic layout template for deliverables and external communication, such as power point presentations, policy briefs or newsletters. As a result, all communication within the project has the same, uniform layout, use of logo and colours. In addition, a separate event logo in a consistent style has been developed for the stakeholder engagement events planned in the project. All partners were instructed on how to use the templates and house style elements.

**Task 7.4: Online tools**

The main aim of this task is the development of an online infrastructure for dissemination purposes. From the start of the project the coordination team was focusing on developing the project website that would be practical and provide clear information and an overview of the project’s progress. This website was presented in a deliverable D7.3 in month 6 of the project. The content of the website is being constantly updated through latest project news, blog posts, upcoming events and through the twitter feeds on the homepage (see [www.projectfires.eu](http://www.projectfires.eu)). The website also offers the full and updated list of all the researchers participating in the consortium as well as the members of the Advisory board. A design of the project newsletter is completed and the first newsletter has been published.

Use of resources

**WP7**

<b>Partner Number</b>	<b>Partner Name</b>	<b>PMs planned</b>	<b>PMs spent in RP1</b>	<b>PMs remaining</b>
<b>1</b>	<b>UU</b>	4,3	1,9	2,4
<b>2</b>	<b>KUL</b>	0,6	0	0,6
<b>3</b>	<b>FSUJ</b>	0	0	0
<b>4</b>	<b>UPRC</b>	0,6	0	0,6
<b>5</b>	<b>PTE</b>	0	0	0
<b>6</b>	<b>POLIMI</b>	0	0	0
<b>7</b>	<b>IST</b>	0	0	0
<b>8</b>	<b>IFN</b>	0	0	0
<b>9</b>	<b>LSE</b>	0	0	0
	<b>Total</b>	<b>5,5</b>	<b>1,9</b>	<b>3,6</b>

**Table 5: Dissemination activities**

Type of dissemination and communication activities (Drop-down menu)	Brief description of the activity (i.e. Title of presentation/conference, short description of the content, etc.)	Researcher involved	Date of the event
Participation to a conference	EU conference EURO-2014 projects 'Changing Europe'/ Presentation of the FIRES project	Mark Sanders	19-20 November 2015
Participation to a conference	<a href="#">European Conference on the Future Internet (ECFI) / Having stand and doing experiment in a mobile lab</a>	Mark Sanders	4-6 November 2015
Brokerage event	Stakeholder consultation with EC	Mark Sanders Philip de Man	6 October 2015
Participation to a workshop	Sustainable Finance Lab workshop, Utrecht University, Presentation of the FIRES project	Selin Dilli	19 November 2015
Participation to a workshop	IWH-Workshop „Entrepreneurship and the Labour Market“	Selin Dilli	22 - 23 April 2016
Participation to a workshop	IWH-Workshop „Entrepreneurship and the Labour Market“, Presentation of working paper	Karen Geurts	22-23 April 2016
Participation to a workshop	Historical Approaches to Entrepreneurship Theory Research, Paper Development Workshop, Copenhagen Business School	Selin Dilli	23 May 2016
Participation to a conference	ABH-GUG conference Berlin, 'Creativity and Entrepreneurship in the Global Economy', presentation	Selin Dilli	27-28 May 2016
Non-scientific and non-peer reviewed publications (popularised publications)	IFN Newsletter; Description of Fires and the project	Magnus Henrekson	June 2015
Website	News Report (text and photos) from Fires' kick-off event in Berlin, IFN website	Niklas Elert Magnus Henrekson Mikael Stenkula	September 2015
Participation to another Event	Presentation of Fires to the board of IFN.	Magnus Henrekson	February 2016
Non-scientific and non-peer reviewed publications (popularised publications)	Annual report 2016: Presentation of IFN's research and researchers in 2015; incl. Fires and the Kick-off in Berlin	Niklas Elert Magnus Henrekson Mikael Stenkula	March 2016
Website	News on home page of IFN -- Swedish and English about the Fires-working paper that was published at IFN; Swedish	Niklas Elert	23 March 2016
Organisation of a workshop	Stakeholder consultation workshop	Luca Grilli	6 October 2015
Organisation of a workshop	Entrepreneurial Ecosystem Academy Presentation and participation in the discussion	Erik Stam Mark Sanders	January 2016
Organisation of Conference	Kick-off Meeting FIRES Berlin, Presentation of the FIRES project to selected stakeholders	All	September 2015
Participation to another Event	FIWARE Smart Cities Amersfoort; presentation of Fires logo, flyers, business cards	Mark Sanders	September 2015

Organisation of a workshop	<i>The New Dutch</i> ; presentation of Fires logo, flyers, business cards	Mark Sanders	October 2015
Pitch event	<i>Startup Festival NL</i> ; Pitch of preliminary reform proposals	Mark Sanders	May 2016
Participation to another Event	<i>ECU-92 Student Association</i> , Interview Chris Buijink (Dutch Bankers' Association), with Fires logo, banner etc.	Mark Sanders	March 2016
Participation to a conference	Third Conference " <i>Geography of Innovation</i> "; presented "A percolation model of economic development"	Koen Frenken Jeroen Content	January 2016
Participation to a conference	International Conference on ' <i>Next Generation Business Models</i> '; Keynote: <i>Sharing Economy: definition, dynamics and debates</i>	Koen Frenken	October 2015
Website	Blog piece published on the FIRES website, Fb and LinkedIn: ' <i>Steering central support for local initiatives</i> '	Philip de Man	4 March 2016
Website	Blog piece published on the FIRES website, Fb and LinkedIn: ' <i>Equity crowdfunding: A new model for financing entrepreneurship?</i> '	Saul Estrin	24 March 2016
Website	Blog piece published on the FIRES website, Fb and LinkedIn: ' <i>The importance of playing an instrument: The SME instrument of H2020</i> '	Luca Grilli	26-apr-16
Website	Blog piece published on the FIRES website, Fb and LinkedIn: ' <i>Megatrends and the transition from a managed to an entrepreneurial economy in Europe</i> '	Axel Marx Ward Munters	18 May 2016

### 1.3 Impact

In short, the information provided in section 2.1 of the DoA is still relevant and needs little updating. We still aim to have an impact on the scientific, policy and societal level and there is no reason to moderate these ambitions at this point. The impact of the FIRES-project after one year is, of course, limited. We are only starting to formulate our reform proposals. It is still very much on our agenda for the remainder of the project to discuss them with entrepreneurs, vested interest stakeholders and policy makers. Still, already in one year, the project has been very successful in reaching out. Our dissemination activities span a wide range of events and stakeholder groups. And everywhere we present our approach and philosophy the project encounters resonance and support (e.g. at our Kick-Off Meeting in Berlin, ECFI in Hamburg, a master class on managing entrepreneurial ecosystems in Utrecht etc. etc.). The FIRES project combines good science, sensible proposals and effectively mobilising support and is already successful in doing so after one year.

The full impact of our project, however, will not be revealed in one year and probably not even after three. It takes a lot of time for society to get acquainted and familiar with and supportive of such complex ideas as the Entrepreneurial Society. We strongly believe the superficial and obvious policy interventions that have been tried to date will not be enough. Our project should be considered quite successful if it is able to put the issue of fundamental institutional reform higher on the European policy agenda and provides some first proposals that make policy makers stop and reconsider. The current trends towards financial monoculture, paternalistic or even protectionist labour market regulations, and the further commodification of knowledge are not the direction the FIRES-consortium

is likely to advocate. The change in trend and direction that FIRES will propose in the end may have its biggest impacts only decades from now.

Our project's main impact will be to provide a sound scientific base for entrepreneurship, innovation and growth policies in Europe for decades to come. And it will start by imagining such policies. FIRES-researchers have already impacted the scientific knowledge base by identifying the relevant institutional system boundaries and published work on how to identify them outside and will within the FIRES-project (e.g. D2.1 and D2.5 in months 18 and 14 respectively). Taking the inevitable multi-level approach to such questions also helps us identify and target the right policy levels for maximising the impact of our work. Also, our project is developing the tools we need to accurately assess the quality of Europe's entrepreneurial ecosystems, both over time and at high-resolution local levels. Such tools are essential in both designing and evaluating policies in this field. The strong link that is being forged with trade, competitive advantage and inclusive employment at the regional level is another clear contribution that sets our project apart and puts the work we do at the scientific frontier.

## **2. Update of the plan for exploitation and dissemination of results (if applicable)**

So far, the strategy for dissemination and exploitation is progressing as planned. Blogs and news items on every deliverable have been published through our website and social media (Twitter, Facebook, and LinkedIn). Negotiations have started on a special issue and edited volume for the dissemination of scientific output. There is no need to update the plan for dissemination at this point as it has been in operation too briefly to already evaluate its effectiveness and should first be implemented now.

## **3. Update of the data management plan (if applicable)**

Data is being collected and provisions have been made for a durable and responsible data repository for all FIRES databases. As none of the foreseen datasets have yet been delivered yet, and the data management has not yet been put to the test, it needs no updating to date.

## **4. Follow-up of recommendations and comments from previous review(s) (if applicable)**

Not applicable

## **5. Deviations from Annex 1 (if applicable)**

The scientific work in the project was planned with sufficient flexibility and although one scientific deliverable was submitted late, the work in the other work packages and tasks are not affected by such unanticipated delays.

### Stakeholder engagement strategy and FIRES events

Based on the experience gained in the first year of the project, especially with the organization of the Kick-off meeting, we had to rethink our stakeholder engagement strategy. It turned out relatively quickly that engaging stakeholders is not as simple as inviting people to come to an event we organized for them. In our original proposal, we anticipated organising relatively large and public stakeholder engagement events. It was envisioned that we could attract significant numbers of entrepreneurs and investors (Berlin, 2015), financial professionals, labour representatives and knowledge institutions (Utrecht, 2016), academics (Hydra, 2017) and policy makers (Brussels, 2018)

to the FIRES-public events. It proved most complicated to attract the first group to Berlin. The main lessons from that meeting were that our events 1) should have something to offer to the specific target audience, 2) it is very hard to find a format that serves the purposes of our project and has something to offer to a very diverse target group at the same time, and 3) the quality of the attendants is much more important than their quantity. The opportunity to talk to scientists doing a project for the European Commission proved insufficient to attract especially those stakeholders with very high opportunity costs and busy agendas. We managed this problem in Berlin by inviting a rather exclusive group of hand-picked, high-quality entrepreneurs, angel investors and incubators. Our exchange with this group was very useful and productive and, as intended, helped many of us to fine-tune the research questions and focus at the start of the project. But with these lessons in mind, we decided to rethink our entire stakeholder engagement strategy and we decided to switch from larger, public events with open invitations to more targeted and smaller events that give the opportunity to have a high quality, intense discussion. For the remaining consortium meetings, it was decided to follow that format and ambition level. Beginning in **Utrecht, in October of 2016**, we will limit our stakeholder group to some 50 invited guests. For the event in **Greece in 2017**, the original plan was to combine the 2<sup>nd</sup> Consortium meeting with an open scientific conference. Given the arguments above, we have decided to only meet with the consortium in Greece and use that time to really craft our reports and deliverables into high-quality journal manuscripts. Instead of the open academic conference in Greece, we will engage with other academics and colleagues in special invited tracks at other conferences and events (IECER2016, WINIR2017). The final FIRES event, the policy workshop in **Brussels in 2018**, will also be targeted at a limited group of high-impact policy makers, switching from quantity to quality. Of course, such a shift of focus should be complemented by a very outgoing attitude to events that others organize for these different stakeholder groups. Several project beneficiaries and most notably the coordinator has so far visited conferences, workshops, and events where the FIRES-stakeholders could be found. There we engaged with them, both through formal contributions to the program and through informal exchanges. The budget implications and changes related to this strategy shift will be worked out further during the next period when more clarity has been created on the exact change and format of the events.

In accordance with this reorientation in the stakeholder engagement strategy, the FIRES-project will be hosting a dedicated track in two large international academic conferences, on multidisciplinary entrepreneurship research (IECER 2016) and on institutions and innovation (WINIR 2017) in Chur, Switzerland, and Utrecht, the Netherlands, respectively.

## 5.1 Tasks

### Task transfer in WP4

During the first reporting period, the coordinator had to handle a major change in the consortium. One of the PIs in the consortium and the work package leader of WP4, Professor Zoltan Acs, has left FIRES partner institution (LSE) as of 28 November 2015, and changed his affiliation to George Mason University, Washington DC. As LSE could not substitute this professor and therefore, was not able to complete its tasks in WP4, it was agreed that all the tasks which were planned for LSE in WP4 and which were not completed by the time of prof. Acs leaving the institution will be transferred and redistributed between other beneficiaries working on WP4. LSE remained within the project as a beneficiary, participating further on only on WP5 with professor Saul Estrin and a junior researcher. An agreement was made with LSE on the task transfer and related budgetary implications (transfer of PMs and related budget). Likewise, it was agreed that LSE will no longer be coordinating the WP4

and the WP4 leadership was transferred to UU. See below the updated arrangement of LSE tasks and budget in the project.

**Table 6: Overview of updated time effort of LSE in the project (per WP)**

Work Package Number	Number of PMs	Comment
WP4	0,23	Used by prof. Acs before 28 November 2015
WP5	2,5	

**Table 7: Updated budget for LSE**

A. Direct personnel costs	B. Direct costs of subcontracting	D. Other direct costs		E. Indirect costs <sup>2</sup>	Total costs
<b>A.1</b> Employees (or equivalent) <b>A.2</b> Natural persons under direct contract <b>A.3</b> Seconded persons <i>[A.6 Personnel for providing access to research infrastructure]</i>		<b>D.1</b> Travel <b>D.2</b> Equipment <b>D.3</b> Other goods and services	<i>[D.4 Costs of large research infrastructure]</i>		
<b>29.566,30</b>	<b>0</b>	<b>8.481,53</b>	<b>0</b>	<b>9.511,96</b>	<b>47.559,79</b>

The tasks that were originally planned for LSE in WP4 are going to be divided between University of Pecs (PTE) and Utrecht University (UU). In terms of time effort, the total of 18 PMs was redistributed from LSE to PTE (16 PMs) and UU (2 PMs). PTE is currently in the process of hiring an extra team member to execute these tasks. At UU the tasks are being distributed among current team. The responsibility in relation to the Deliverables planned in WP4, was distributed as follows:

Deliverable Number	Deliverable Title	Lead beneficiary old	New Lead (updated)
D4.1	A review paper on the extension of the GEDI-indicator with additional indicators on financial, labour and knowledge institutions	LSE	UU
D4.2	Pan European database with time series of new GEDI-indicators	LSE	PTE
D4.3	Time series and panel data analysis of GEDI and growth performance indicators	UU	UU
D4.4	Pan European database with new REDI-indicators	PTE	PTE

D4.5	Cross-sectional analysis of REDI and regional growth performance measures	UU	UU
D4.6	GMR model for Europe linking Entrepreneurship, Institutions and Growth	LSE	PTE

As the expertise of prof. Acs is very important for the project, together with the project officer, we were seeking for a solution that would allow him to stay connected to the project. Despite all efforts taken, it is not possible to keep this PI affiliated to the project as a partner through his current employer, located in US. Therefore, prof. Acs was invited to join the project Advisory Board to ensure his invaluable expert advice will be still available to the consortium. Prof. Acs as a member of the advisory board will remain at disposal for any necessary consultancy, he will contribute to the deliverables and attend the annual project meetings.

This entire procedure of searching for a suitable organisational solution caused some delays in the progress of the work on WP4, but thanks to the excellent cooperation of both LSE and GMU, which enabled prof. Acs to continue his work on the FIRES project, this delay was only minor. Currently, everything is settled and the work is in a full progress. We have now allocated more senior time to the work, we anticipate that the slight delays encountered in the first 12 months will not affect progress in the second part of the project.

#### Delay in achieving two milestones

In the first reporting period, we have experienced some delay in achieving 2 milestones, in work package 2, and work package 4, compared to the DoA. The delay of MS4 in WP4 was caused by the organizational issues and changes in this work package, as described above. By now necessary arrangements regarding the tasks redistribution have been made and it is expected to reach this milestone at the end of July 2016, in month 14 of the project. The delay of MS2 (WP2) is caused by reorganization of deliverables during the grant preparation phase. During the preparation of the Grant agreement, the EC requested to reduce the number of deliverables. To meet this requirement, the old deliverables were clustered, re-numbered and re-dated accordingly. Each milestone identified in the FIRES project is related to a certain deliverable and this deliverable serves as a means of verification of reaching the milestone. Nevertheless, during this process in the grant preparation stage of the project, some of the milestone deadlines were not connected to their corresponding deliverables. MS2 is therefore expected to be achieved in month 18, together with the related deliverable D2.1.

The responsible consortium members are aware of the importance of these milestones for the further progress of the project and intense communication among those involved and the project coordinator ensure no delays will propagate through the project. There is no need to change the deadlines for future milestones, as these will be achieved as a sub-step toward the deliverable. The updated overview of milestones and their status are in the table below.

**Table 8: Updated Milestones**

Milestone number	Milestone title	WP number	Due Date (in months )	Status
MS1	Kick-off Meeting	WP1	3	Achieved in Month 4
MS2	An institutional framework for innovation and entrepreneurship	WP2	12	To be achieved in month 18
MS3	Pan European database with new indicators of related variety at national and regional (NUTS2) level; related variety indicators based on sectors, products and tasks	WP3	12	Achieved
MS4	Pan European database with time series of new GEDI-indicators	WP4	12	To be achieved in month 14
MS5	Pan European database with new REDI-indicators	WP4	18	To be achieved in month 18
MS6	Internationally comparative dataset on startup processes and their institutional foundations in Germany, Italy, the UK and the US; Sequence analyses that reveal country-specific typologies of startup processes and their institutional foundations	WP5	24	To be achieved in month 24
MS7	An institutional reform strategy for Germany, for Italy, and for the UK	WP5	32	To be achieved in month 32
MS8	Entrepreneurship Policy: a multidimensional and multi-level assessment	WP6	12	Achieved
MS9	Identification and assessment of the legal implications of an entrepreneurial reform agenda	WP6	24	To be achieved in month 24

## 5.2 Use of resources

### Deviations in WP1 and subcontracting tasks

During the first reporting period, we have experienced minor deviation in the use of time resources in WP1. In the first year of the project, already 60% of PMs originally planned for WP1 in the project has been spent. The reason is threefold. First, setting up the project requires more effort to be invested from the start to set up the management structure, quality assurance procedures, progress monitoring, data and publication strategy etc. Therefore more PMs were already expected to be used in this period. Second, in the first year, a few unexpected issues have arisen that needed investment of extra time effort from the management part – especially related to the changes in WP4 and prof. Acs leaving LSE. Third, this is related to the change in our stakeholder engagement strategy and plans for

organization of FIRES public events. In the proposal, lots of work related to the stakeholder engagement procedures was expected to be done by the subcontractor. Due to the change in our approach (as described above), we have decided to shift some tasks to coordination team (project manager, scientific coordinator). For instance, the public part of the Kick off conference was originally foreseen to be organized by a subcontractor, including handling all the related organizational issues. These tasks were in the end done by the coordinator and big proportion of time effort went to the project manager. Likewise, the scientific coordinator contributed greatly to the tasks related to stakeholders mapping, setting up the contacts and later, adaptation of the strategy. Based on the project experience up to now, we believe this is more efficient way of handling some of these tasks.

In accordance with this shift of tasks from subcontractor to coordinator, the costs for subcontracting are expected to be much lower than originally planned. Part of the subcontracting budget will be thus transferred to direct costs to cover the organizational costs of the Kick-off event and extra effort of the coordination team spent in the stakeholder engagement activities over the remaining time of the project. This budget transfer will be only between categories within UU budget and will not affect other partners. Further details on the amount needed to be transferred will be worked out in the next period, when there is more clarity on the exact tasks distribution in stakeholder engagement processes for upcoming project events.

### **5.2.1 Unforeseen subcontracting**

#### Personnel costs at Politecnico di Milano (POLIMI)

In October 2015, the EC “Common Legal Support Service” published a restrictive interpretation of the art. 6 of the Model Grant Agreement regarding the personnel costs (in the [List of issues applicable to particular countries](#)). According to this interpretation, some of the staff employed by the Italian partner institution (POLIMI) cannot be claimed as Personnel Costs but alternatively - on the basis of the activity carried out - as Purchase of services or Subcontracting. This restriction concerns following types of contracts: .ca conso, i.e. co.co.pro, co.co.co., and assegni di ricerca.

For this reason, POLIMI would like to reallocate the cost related to the staff costs of FIRES researcher Boris Mrkajic (employed on “Assegnista di Ricerca” contract), from the *A. Personnel costs category* to *B. Subcontracting costs category*.

### **5.2.2 Unforeseen use of in kind contribution from third party against payment or free of charges (if applicable)**

Not Applicable