Regional and Local Labour Market Intelligence through Labour Market Monitoring

Further Development of Existing Instruments and Opportunities from New Information and Communication Technologies

Results of the 4th Annual Meeting of the European Network of Regional Labour Market Monitoring in Copenhagen on the 8th and 9th of October 2009

The annual meetings of the European Network of Regional Labour Market Monitoring serve the conceptual development of instruments for regional labour market monitoring. A special characteristic of these conferences is shown through the theoretical and conceptual considerations of the Network members and selected external experts on the real-world experiences and 'best practices' examples. In this way, it is ensured that the practical developments are rooted in the most current findings in the scientific and theoretical-conceptual research.

Previous conferences were focused above all on the instruments used for generating and analyzing data in regional labour market monitoring. Conceptually however, only a part of the monitoring process was well specified. The specification of the interfaces between data and user, as well as between user and their actions, remained something of a conceptual black box. In order to fill this gap, in this year's meeting the theoretical-conceptual perspectives were primarily addressed. This continued into considerations of the implementation strategies and which interactive instruments could then be ideally used. From such a specification, it can be expected that, through regional labour market monitoring, a regional or local intelligence can indeed be created. This is composed of having monitoring provide more transparency to regional or local actors in a labour market and its labour market politics. On the basis of this common information basis, decisions can be made and actions carried out.

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1. Conceptual Approaches for the Specification of the Interface between Data and Users

The conceptual specification was approached using two different perspectives. Firstly, the "OECD Framework for Information Exchange in Local Development" (FIELD) was presented, which includes a sequence for building up a local information system. This sequence process integrates already existing monitoring elements into the construction of the interfaces. The second perspective drew on conceptual approaches from Human-Computer Interaction, also to be able to specify the connection between data and users, and their actions.

1.1 OECD Framework for Information Exchange in Local Development (FIELD)

Within the context of the OECD LEED Programme (Local Economic and Employment Development), the project FIELD (Framework for Information Exchange in Local Development) has been used to explore how a "culture of evaluation" can be built up within a local context and, furthermore, sustained. A culture of evaluation starts when local actors reflect on which background information (indicators) they need for their relevant strategic decisions. For this, it must be found out, what data (indicators), mostly official, already exist, where are their limits and how such sources can be complemented with local data and made available. In connection to this, it also must be considered what resources are available for this and which topical areas should be prioritized in the data. For simplified execution, a framework was developed in which areas of concentration are first defined (performance outcomes, drivers, policy actions on drivers, enablers and capacities)[1]. Derived from these, the information landscape components are given. These components, which build chronologically on each other and, thus, comprise a general sequence, are used to anchor the three basic functions of monitoring and their associated elements. The following table provides an overview.

<table>
<tr><th>OECD Framework – Information Landscape Components</th><th>Basic Functions and Related Conceptual Elements of Regional Labour Market Monitoring</th></tr>
<tr><td>Information Supply Chain
(which determines the information which is available to construct indicators, and to inform policy and strategy. Good information supply chains build data locally, are based on micro data that can be processed according to local information needs)</td><td rowspan="2">Information Function
User Oriented Specification of the Monitoring Systems and Data Generation
Starting point for the specification is the identification of regional and local information users. Questions include:
1. Who are the potentially strategic and operative information users?
2. What information do they need for their decisions and actions?
3. In what form can they process and use information? (complexity, data format, location and time access issues)
4. What resources can they use for this?

Creating the data store is first done by pulling in</td></tr>
<tr><td>Information Governance
(which involves the factors that control and constrain what the local areas can do with information once it is collected. Good information governance statistically empowers local areas and provides policy focused information, rather than simply generates funding driven information.)</td></tr>
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[1] For more information, see presentation no. 2

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	the official and public data relevant to the regional or local area. Holes in the data, and more detailed information, are addressed by local data or expert knowledge.
Analysis and Value-Adding (comprises the actions that take place to process information into intelligence and knowledge.)	***Communication Function*** ***Management of the Interface between Data and User(s)*** Specification of the instruments to be used for communication or information transmission. Questions include: 1. Which interactive instruments could be implemented most effectively with respect to the objective and subjective requirements of the users? 2. Which conventional instruments make sense for a face-to-face interaction? 3. Which ICT-based instruments could be useful? 4. What combination of conventional and ICT-based instruments result in the optimal communication with the users?
Consumption (describes how the resulting knowledge is 'consumed' at all levels of the organisation and beyond by other actors.)	***Action Function*** ***Management of the Interface between User(s) and Action*** Specification of how individual actors obtain information; how they communicate about it; how they relate to other relevant actors in the regional or locality; how they commonly decide and act; so that in this way, local intelligence is created. Questions include: 1. What meaning do single actors and their functions have for the usage of this information, meaning the translation of this information into decisions and actions? 2. What meaning do local or regional networks reach? 3. What importance do organisations and general conditions have for these actors in this process?

The OECD Framework supports on the one side a systematic localisation of monitoring functions and their associated elements. On the other side, the framework provides a new perspective and new approach, which illustrates new aspects that can be relevant for further specification. ***At the Annual Meeting therefore, a continuing exchange between the OECD LEED Project and the Network was agreed to.*** Each of these development paths can certainly provide new insights for the other.[2]

[2] For more information, see presentation no.2 and 3.

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1.2 Human-Computer-Interaction (HCI)

With the help of concepts drawn from the Human-Computer Interaction approach, it is possible to more exactly specify, in the form of a 6-step phase model, the functions found in the interface between Human and Computer, or between the user and the data.

Phase 1: Perception
The perception of information by the user is a complex process, largely directed by perceived symbols, by stimuli, and by structures. The result is a perception taking place at various levels, each of which is intertwined with the others. One level is that of the user's consciousness or intellect. Underpinning this is the level at which lay automatic responses, which are born out of experiences. These also influence the perception process. Conscious and subconscious levels are also active in other phases.

Phase 2: Interpretation
The perceived information is interpreted by the user. This occurs as the information is placed within the context of previous knowledge and experiences and a meaning or sense is associated with the information.

Phase 3: Judgement
After this, the user decides, if, and if so, what value or relevance the information has for the user with respect to his or her decision-making or action areas.

Phase 4: Objectives
The user applies the information in order to compare how the perceived situation or status differs from his previous assessment or confirms it. On the basis of this situation analysis, he or she then defines the goals to which his or her decisions or actions should achieve.

Phase 5: Intention and Specification
The user plans how he or she will like to reach his or her goals. In this planning, he or she chooses the necessary resources and strategies, and specifies these against the desired context or against the general situation.

Phase 6: Execution/Action
Finally, the execution occurs in the form of decisions and/or actions.

This phase model shows how data generated from regional labour market monitoring is perceived and processed by the user. Further, it shows how this data is transformed into knowledge and how actions can stem from it.
These processing and decision-making processes are however embedded in specific environments that in turn have effects on how these processes operate. Environmental elements derive from the organisations and their internal logics in which the user is present. The technological requirements (hard- and software) also play a role. Not the least, how the user is located, or the perceived location, within an organisational and technological context plays a further role. What this means for the specification of interfaces between data, user, action and their implementation in appropriate monitoring instruments is that a complex interplay of requirements needs to be considered, in order to ensure that monitoring information is indeed relevant for decisions and that local or regional intelligence is created.[3]

[3] For more information, see presentation no. 5.

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2. Interactive Instruments for Structuring the Interfaces between Data and User

The theoretical-conceptual approaches form the background for specifying instruments to be used in regional labour market monitoring. This assures that data and information will become user knowledge and will influence the user's decisions and actions. Interactive instruments are relevant here. Two groups of such instruments can be described: The first group is composed of those that permit face-to-face interaction between data providers and users; here labelled as so-called conventional instruments. The second group brings "information and communication technology" (ICT) based instruments into view. These are to be explicitly specified within the context of HCI.

2.1 Conventional Face-to-Face Instruments

Using best practice examples, the Workshop and Consulting instruments were presented. A significant advantage of both instruments is that the interaction between data provider and user can be adapted to the interests of the user, even when these change. In addition, the user can be supported in the process of obtaining and processing the information. It was also shown in the examples given in the Conference, that face-to-face contact can strongly ensure that the perception, interpretation and evaluation of the monitoring information actually occurs, and thereby already completes the first three phases of the process described above. This goes further by providing positive preparation for continuance into the following phases. One example makes this clear: that a user; who is not particularly comfortable with technology, who has little time to spare and who stands under pressure to make decisions; will find these instruments very effective. One significant disadvantage of these instruments is that they require considerable time and financial resources on the part of the data provider. Furthermore, with these instruments only a comparatively small audience can be reached. The preparation of information occurs only sporadically, particularly in connection with location and time, resulting in a quite limited scope for administrating the data. The continuous data and information preparation and transmission that are so important for regional labour market monitoring can prove to be a quite large and difficult challenge in the real world, given the amount of resources they require.

One possible solution to this resource problem was given in the example of de-centralised Consulting Offices. These take on, in addition to other tasks, the transmission of monitoring information in their contacts on-site.[4]

2.2 ICT-Based Instruments

Web-based information platforms are meanwhile a widespread instrument, also used in regional labour market monitoring. Using various best practice examples, it was shown how these could be constructed. There was general agreement that the specification must be grounded on the users and their needs in order to secure a sustained usage of these instruments. Currently, operative applications are nearly exclusively **products of web generation 1.0**. These primarily static systems seem to satisfy the technical requirements and competencies of most users, as well as their demands. In most cases, it is sufficient when single tables or graphics can be downloaded from the web site. There is also acceptance in these systems for integrated dynamic elements, which, for example, allow the

[4] For more information, see presentations no. 6 and 11.

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user to combine various pre-defined characteristics to match individual interests. The results, which were previously generated and stored, can then be called up. The user acceptance can be improved through the use of graphic data presentations. The possibilities opened by geographic information systems (GIS), for example, offer good options here. The use of these instruments makes it clear that they provide in continuous operation a broad distribution of results with a minimum of resource usage.[5] **Products of web generation 2.0** are not yet implemented for the purposes of regional labour market monitoring. Especially Wikis seem to be appropriate conceptually for communication within small regional networks. However, they are not yet user-friendly enough due to the scripting requirements. This prevents them from finding acceptance within the user groups of regional labour market monitoring. In the case of complex database systems, the first experiences have been collected and they show that the regional users in associations, politics and public administration do not use them because of the elaborate data access methods of the data bases. In this initial phase, it is primarily experts in research and Statistical Offices that appear as users. They create analyses of the data in the form of small reports, which are, in turn, passed on to the regional users. Thus, the regional users are being reached indirectly. This arrangement does not however achieve the range of information distribution that would be possible with web-based information systems.[6]

2.3 Combination of conventional and ICT-based Tools

Among the Conference participants, there was consensus that the interface between data and user is best realized with a combination of conventional and ICT based instruments. Depending on the requirements of the individual user groups, especially with respect to their affinity to the internet culture, ICT-based instruments can be implemented in greater or lesser degrees. It is important here to know the user needs in the selection and specification of instruments and that these needs are addressed. The selection of instruments will also certainly be influenced by the available resources of the data provider. It appears at the moment that, in the majority of regional labour market monitoring projects, the data is being made available through a web-based information platform. In addition, workshops are still conducted in order to: one, bring awareness to updates and new issues and, two, to be able to better transmit complex information.

3. Activities to Disseminate the Conference/Network Results and to Connect with the Real World all over Europe

One of the fundamental goals of the Network is the continuous development of instruments in interplay between research/theory and the real world. For this, it is important that the results generated within the Network are broadly distributed. In the Annual Meeting, it was decided to intensive both the dissemination of information as well as the connection to the real world. This is to be accomplished by first improving the existing instruments and, secondly, building systematic ties to the Regional Labour Market Observatories in various European countries, simplifying the connection to the real world. Beyond this, it is intended to increase the focus on topics, against the backdrop of coping with the economic crisis, to which the instrument of regional monitoring can contribute.

[5] For more information, see presentation no. 7.
[6] For more information, see presentation no. 8 and 9.

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3.1 Media of the Network

The media already used by the Network should be continued and expanded to better disseminate the results and findings generated by the Network. The **Newsletter**, which has been published up to now roughly three times a year, should appear more often and used more as a forum for exchanging information between Network members. The **Network Homepage** should be continuously updated and expanded with additional information areas. Among other things, competence profiles of the Network members and consulting services should be presented.

3.2 Networking all Regional Labour Market Observatories in Europe

In recent months, many actors have turned to the Network, primarily from Eastern European countries, to receive information and consulting related to the creation of regional labour market monitoring. Driven by the current crisis, the need for transparency at the regional labour market level seems to have sharpened. This is also shown in the growing number of labour market observatories. Specific to the current situation is that many labour market observatories act in isolation and are rarely linked to other observatories. In addition, their concepts and implemented methods are very heterogeneous, which makes national or international comparisons difficult. To improve this condition, the Network members decided to hold the **First European Conference of Regional Labour Market Observatories** in 2010. This Conference will occur on the day before the Annual Meeting 2010 in Marseille. This should bring together the 150-200 Regional Labour Market Observatories in Europe to enable an exchange of best practices in the areas of data, methods and instruments. In addition, it is planned to create an interface to the European Network of Regional Labour Market Monitoring in order to make the know-how of the Network members available for the Labour Market Observatories. This will also serve to feed the Network with questions and problems from the real world for research / conceptual development. The first meeting should be the starting point for this network. International and European organisations (ILO, OECD-Leed Programme, EU Commission, EU Parliament, E.E.S.C., Committee of the Regions, Eurostat etc.) should be approached for their support. Preparations for the Conference will be performed through the Network Co-ordination in IWAK. A secretary for this task will be created.

3.3 Current Topics, Network Anthology, Annual Meeting 2010

As unemployment, in particular among the young, is an important starting point for the creation of regional and local labour market observatories, the Network members decided in Copenhagen to dedicate themselves more strongly in the coming year to this topic. It should be explored in the coming months, **how regional labour market monitoring can help to create transparency to systematically reduce youth unemployment**. Of specific interest are the users, the data, the analysis and the instruments which are used for communication, and in what spatial, social and political contexts this occurs. In the fourth volume of the Network Anthology, the contributions should address some aspects of this issue. This will also provide the theme for the Annual Meeting in 2010. This will take place on the 8th of October in Marseille. Host will be the *Centre d`Etudes et de Recherches sur les Qualifications* (CEREQ).

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4. Perspectives

This year's Annual Meeting and the acute interest in it have confirmed that regional labour market monitoring is a topic of great importance. The Network has grown substantially since its founding, without external funding, four years ago. Meanwhile, the Network has over 400 members in 20 European countries, representing over 80 institutions. The Network will continue to use the wide-ranging potential of its members in conceptually developing instruments. The Network will also support practitioners of regional labour market observatories when they want to further develop their methods, data and instruments, and to standardize these as well. All these activities contribute to making possible a common European labour market.

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