



## EFORWOOD Task Force Indicators Data collection feedback "Single chains"

**Summary:** A total of 9 responses have been received by 27 September 2007, of which 8 used the forms provided. Four respondents also used the option of providing responses in detail through the Excel table (see separate file). The following lists responses per question.

GENERAL FEEDBACK - DATA COLLECTION FOR SINGLE CHAINS
<p><b>1. Overall management of data collection</b> (was overall project coordination on data collection sufficient? Was there enough support? What should be improved / changed for regional case studies?)</p>
<p>A slight problem was caused due to collecting the data while it was still partly undecided who shall ultimately collect it and in what form: this goes e.g. for transports. But it was also that according to our understanding, it was the collection process itself that evoked the question on the need to revise some protocols, so this process was nevertheless useful. Overall, for data collection for regional case studies, it should be made crystal clear for each party which indicator values belong to whose responsibility.</p>
<p>I started working in this project only in September 2006, so for me, the responsible area of each data collector was a bit confusing in the beginning. The lists (excel-sheets) etc. have made it easier to understand, which data I should be getting, so I support the system of coordinators notifying the data collectors that "this data is missing, find it". ☺</p>
<p>I think that in general the communication on data collection needs to be improved. It is hard for people not as involved as I am in all the protocols etc, to understand where the protocols are, where they are meant for, what is the difference with the FWC Indicators, but also WHEN to provide data.. who they should contact in case they cannot find data (now they just leave the cell empty and that is what we do NOT want) if they should fill zero's or not available or not applicable.. etc.</p>
<p>Looking back now, I believe that maybe things could have been better coordinated from the start. Although, if I were in your shoes I would have probably made the same mistakes if not worse. I understand that this is, was and will be an interactive "do/learn" process, so the best thing to do now is try to improve all the steps from the data collection to the indicator calculus.</p>
<p>When it comes to support, well, I didn't exactly feel supported, but maybe (<u>0th problem</u>) I didn't know who to turn to. Maybe the people responsible for each of the task forces should have been the right option. So, my <u>suggestion</u> is to gather a group of people who will become responsible for providing answers to all questions that might come up. And maybe placing the frequently asked questions (faq) on the portal (and its respective answers). On the other</p>

hand, I know that from your side this won't be easy because each country has its own reality and its own peculiarities which haven't even crossed your mind. So, it will be a tough task to fulfil!

When I first started calculating the indicators the 1st problem I faced was having received the excel file, where I was supposed to fill in the indicators, almost at the same time that I was supposed to send it filled in. It doesn't matter whose fault it was. My suggestion is to build a mailing list containing the names of the people responsible for the indicator calculus for each single test-chain so that everyone receives the information on time and at the same time. As soon as I received the excel file I gained access to the names of the indicators, but I didn't know their definitions. After some time I came across a document "Lead Plus indicators (proposed set 1)" dated of 20<sup>th</sup> May 2006. The 2<sup>nd</sup> problem was trying to find the indicators definitions, the units, the data sources and some calculus procedures. Don't expect everybody to search for the documents they need on the portal (I speak for myself), besides it's not easy to find the document you're supposed to use in the middle of so many documents placed on the portal. It might not be obvious for some of the people who will get to calculate the indicators where and what to look for on the portal regarding the indicators. It's utopia to think that people read the deliverables of other modules/workpackages than their own. We don't. I don't read yours and you don't read mine. Suggestion, there are two possibilities:

- you can either send a list of all final versions needed to those people on that e-mailing list so they can start working on the indicator calculus or
- you can create a special place on the portal where all relevant information regarding the indicators calculus (no matter from what modules/workpackages) should be placed.

"Lead Plus indicators (proposed set 1)" deliverable provided me some extra information, although it still didn't have all the answers to my questions. Real questions come up when you try to provide what you are being asked for based on the data you have collected. By the time I was almost finished calculating the indicators I heard of a new document: "Annex: FWC Indicator draft set 4" dated of 20 October 2006. This was an extensive document written in black, green and red which compiled what had been presented on a previous draft with some ToSIA suggestions. In my opinion, maybe this document had a helpful structure to W.P.1.1 as a working document, but it still didn't provide the answers I was looking for and besides that it wasn't that easy to read. Suggestion: a manual on data collection and indicators calculus containing only the relevant should be made from all the existing documents.

When I first received the file I started working on it and added some columns and rows and then (3<sup>rd</sup> problem) I had to reformat the whole document. I don't know if you intent to give them a similar excel file as the one I've received, but I think (suggestion) it would somehow be helpful if you could explain people who will be involved in this task, all the steps after the data collection and the indicator calculus. People should have been told why you need what you need, and why should things be provided in a certain format with all the fields filled in in the proper way. Another example, it was only recently that I realised that the definition of processes in M2 and M3 (for instance) are different. In M2 regeneration phase is treated as a process even though it comprises several different silvicultural operations while in M3 a single silvicultural operation is considered to be a process. When I heard from M3 that a single silvicultural operation (like planting) was to be considered as a process I was extremely upset, because being true, that would mean that I would have to reformat the

whole excel file once more not to mention the implications that that would have in the values of each indicator. Cross-talking to other modules might lead to misunderstandings if things are not clear to everybody. It would also be very important to explain people the meaning of: conversion factor, transformation factor and time multiplier.

There was not sufficient co-ordination within the Module, some co-operation was made, but this was not co-ordinated in a good way by responsible persons.

We had also too little resources available so that there was a lack of time for the inventory (internal reasons not related to Eforwood project).

There is now an initiative in the Waste group to co-ordinate the inventory of waste management processes (e.g. landfilling and incineration). This is foreseen to improve the inventory process. It would be helpful with similar co-ordination on transport processes, and other processes where there are obvious similarities between case studies/product groups/modules.

The overall project co-ordination and support on data collection did prove to be sufficient. This was largely due to the appointment of staff members with expertise in each of the main sustainability indicators of Environmental, Social and Economic. Furthermore, the chosen test site (Craik Forest, Scottish Borders) lies within Forestry Commission management with well-documented statistics and studies relevant to the Eforwood agenda. Collaboration between module leaders and Craik forest management staff, along with the utilisation of existing research results was essential in creating the primary foundation of data collection.

No the overall project coordination on data collection was not sufficient. In fact, it hardly existed at the beginning and only very little support was provided. The situation changed a when the task forces provided their protocols. However, we have to say that individually specifically requested support was good when it concerned the database client. Development of Database Client was a major and important improvement.

In my opinion the protocols were delivered too late.  
And are still not finished.

## **2. Data collection protocols**

(were instructions and definitions clear enough? What should be improved / changed for regional case studies?)

The meaningfulness of some indicators that rely heavily on expert assessment still evokes some questions. These indicators can be valued, no problem in that as such, but how accurately can we track changes in these indicator values, as they are very subjective to begin with?

Perhaps it would be advisable to cut down some indicators to which clear and explicit gathering procedures cannot be addressed.

Indicator specific data collection protocols have been informative. I still think there might be a need for an update for each protocol, so all the needed information (e.g. measurement units) would be consistent in data collection. Perhaps the requirements for conversion factors could be described in more details, too?

I think they provide good guidance. Unfortunately the forum is not a very active place for discussion, but at least with the collection protocols presented there, people also know who to approach in case of problems..

<p>I suggest that chapter 4 starts with a list of the indicators and “sub-indicators”  When you have tables under “module specific considerations” are you expecting some feedback from the modules? Have you asked for it?  I know that this document is supposed to be specific for socio-economic indicators, but shouldn't there be a “Protocol on Data Collection” containing the whole list of indicators?  Is there a similar document for indicators other than socio-economic ones? Where can I find it? I'm been to the portal and I can't even find the document named “Protocol on data collection - SE indicators_FINAL_25May07.pdf” under the 1.1 Workpackage documents.  Am I looking in the right place?</p> <p>(regarding how clear definitions are you can find some comments on the file “FWC SI_Single Chain data collection_feedback.xls”)</p>
<p>The data collection protocols in general contained too much information, discussions and questions. This will be handled as the development of the indicators and data collection protocols now goes on. I think it is very important to restrict the information given in the data collection protocols to that which is necessary for their purpose: To guide the inventorying.</p>
<p>Data collection instructions and definitions were relatively clear through the publication of concise manuals detailing objectives and expectations. However, there was some confusion over terminology, yet this may be remedied through the creation of a glossary of commonly used Eforwood vocabulary.</p> <p>The regional expansion of the FWC will present complications such as the level of detail possible to obtain versus the time it will take to obtain it, and the acquisition and accuracy of private forest data. Regional case studies should be able to work from pre-existing templates of structure as used in the preliminary case study while allowing a subjective flexibility to both geographic and time scale changes.</p>
<p>Instructions were not always clear enough. There are still many open questions. To give an example, all data is related to a specific processes and reference unite is 1 ha (M2). How much does a women/man earn per process and ha in the case region or per hour?  Is it i) salary costs per process in total [€/ha] *%of female worker or ii) is it average salary of a female worker [€/h] (= almost the same as a maleworker)?  Further, many indicator values can be reported for the region but cannot be related to a specific process. A thinning operation does not affect enterprise structure...</p>
<p>See comments in the excel sheet.</p>
<p><b>3. Data collection</b>  (overall, what was the most difficult obstacle faced in data collection? What should be improved / changed for regional case studies – esp. how would you suggest to deal with data availability gaps, data quality weaknesses, other issues?)</p>
<p>There were quite many spots where sometimes rough estimates had to be made.</p>
<p>KCL has used mainly it's own database on environmental indicators, so reliable data has been easy to find, especially since the needed indicators have been detailed and data collection protocols have been clarified. Conversion factors have been a bit difficult, since some of them take place between module boundaries, and there have been questions about dry-content of materials etc.</p>
<p>One of the most unclear things is the fact that some data is not suited for collection of process</p>

level (e.g. trade balance).. this is acknowledged by the indicator task force people.... But I know that people not too involved in these groups.. are getting uncertain about what to do with it. Another issue is the amount of units that can be chosen, when filling in the database. I.e. Tons, tons of paper, tons of newspaper can all be used to indicate a ton of newspaper. A further point is data quality, I know, data collectors are not too happy to give data that they know has not so good quality, on the other hand, the ToSIA developers need data ... And one of the weak points of this project is that ToSIA results will be valueless if not all data points are filled in..

Are we obliged to collect our data from the sources you suggested in this document? Because most time I didn't do it? (mainly because when I first started the data collection I did not know where to search)

People should be told what to do in case they can't provide a value. If there are no statistics or data for calculus at all I think the indicator should be considered "not available", but what will we do in a situation where we can fill in one of the "sub-indicators" but not all of them, shall we classify it as "not applicable" or as zero. Or should these last two classifications have distinct meanings.

On one hand, I might think that one indicator is "not applicable" to a module, for example "LI03.3.a - exports of wood in total FWC – volume" I either didn't understand the meaning of the indicator (and then the protocol is not clear enough on this definition) or this is not applicable to M2, because the way I see it M2's final product is "standing trees" therefore I can't present a value for wood exports... On the other hand, for the indicator transport, applicable to M2, I can provide a value for the sub-indicator "LI15.1.a - Transport distance - road transport", but only to this one because all other ways of transporting are not used in Portugal, then it might make sense to consider them zero instead of "not applicable". This has to be further discussed.

Obstacles: To find data, to find data with good quality and within the boundaries of each process definition.

A general comment is that we used "not applicable" in cases where we now realise we should have put 0 as a value instead. It would probably be useful to have some clear guidance on when "not applicable" should be used.

To give the possibility to use data which are rough estimates it has to be possible to state that as a so called "indicator attribute" in the database client. No there is expert judgement, own measurement, etc, which is not really true for a rough estimate.

There is also a problem of getting an overall view on the data quality since the different reporters may have different perceptions on what is Low or High representativity.

There also needs to be a good feed-back from the TOSIA calculations to explain what is relevant and what kind of data range can be used without giving a large impact on the results. When we have the first results we can also see if e.g. M2 has a very small contribution to the economic indicators, then of course there is not a problem with the more rough estimations, but the focus should be put on the "hot spots".

The most difficult obstacle faced in data collection thus far has been the availability, accuracy and consistency of data, particularly concerning the private sector. In order to develop regional data sets the application of one or more of the following may facilitate data collection: the formation of statistics on known data that may then be applied proportionally at a larger geographical scale; offer incentives or bonuses for private land owners to co-operate with the Eforwood study; propose to fund and co-ordinate studentships and/or thesis projects that may focus on areas with data availability gaps.

<p>Most difficult obstacle: data not exactly available for the single process: e.g. we could provide data for our whole region (Baden-Württemberg) and for a specific species, but not for single processes. So information is at hand but does not fit into the structure of the database client.</p>
<p>Data are often not available for the single processes and it is almost impossible break values down to them, especially to subclasses.</p>
<p><b>4. Data client</b>  ( usability and user-friendliness of data client and related issues that should be addressed? What should be improved / changed for regional case studies?)</p>
<p>The basic idea of the current interface is quite good, but there are some technical and practical problems. One problem is that when scrolling down indicator toolbars it is quite slow which makes its use sometimes frustrating, couple of times it has announced “catastrophic failure” and “key violation” during scrolling.  Another issue is that after choosing “Apply updates” it would be nice to receive a message, for example “saving successful”, now it is not completely clear if the changes are saved or not.  Currently to see the values of the indicators, each indicator must be clicked one by one; listing property would make for example checking the inserted values much easier. Printing /exporting indicator values of a process is often needed, so a possibility to see them at one glance would be good improvement.</p>
<p>Data client is a good idea, and works quite well. It makes it easier to see the missing data, and it is easy to feed the data into the program. The excel-sheet lists of missing data and responsible modules /persons are also very informative. Inconsistencies with units etc. are also easier to notice in the excel sheets than in the client.</p>
<p>Although I acknowledge that the coming of the data client has been a major step forward, there are still a few things to improve:</p> <ul style="list-style-type: none"> <li>- It is not possible to get a (quick) overview of what data is still missing.. one needs to go per process, per indicator, through the whole database to see what is there.</li> <li>- There should be only one unit possible per indicator. (No choosing options)</li> <li>- One should get an overview of what data is missing and/or is filled in as not available or not applicable.</li> </ul> <p>The chains are so detailed and single chain specific.. the same goes for the list of regions.. it would be more clear if there was a more generic approach (only country level data and just a few building blocks for the processes) but this in more a recommendation to EFORWOOD/TOSIA in general.</p>
<p>I haven't checked the data client for a while so I'd rather make no comments because some of the things I might suggest can already have been altered. Can we discuss this again during the training in November here at ISA?</p>
<p>It should not be 0 as default in the inventory sheets.  Add indicator attribute: Rough estimation  Most important, we would very much appreciate another interface, i.e. the excel format which has been sent to us for feed-back. These files have been very informative, providing the overview and easy to use. The inventorying would be much less time consuming with this possibility and errors could much easier be noted at an early stage. With this possibility we</p>

could also save the data and there would not be a need to type all data into another internal document.

The usability and user-friendliness of data client and related issues has been reasonably problem free so far. The Eforwood website may find it worthwhile to dedicate a portion of the site to a hypothetical FWC where the user may view, adjust, and recreate a sample chain in order to better visualise the dynamic processes involved in the SIA. Conversion factors should also be clearly labelled, defined and explained.

Some bugs, e.g. :

-We were not possible to fill indicator data for more than one process without restarting the database client.

-If once chosen the “availability”-box it is not possible to remove it (if it is possible now to calculate an indicator)

For the future: very important that an automatic interface to M2-database is designed!!! It takes so much time to fill in the data by copy and paste and a control is hardly possible (Lets say it in the word a my co-worker, it is most stupid and frustrating work).

Very helpful would be an export or/and printing function for the indicator values to check which data are missing and which one are typed in wrongly.

In the drop-down field I missed a blank field.

Indicators should be right in order: 1,2,3... For example indicators 11 and 12 occur between indicators 14 and 15.

### **5. Data collection training**

(please indicate whether “ training” was sufficient for data collection for single chains? What should be improved / changed for regional case studies?)

Training was sufficient.

Use of Data client was explained in Zvolen: that was good. Other training has been done mainly through reading documents and protocols etc. Face-to-face training is always better for me.

o.k. but see all point above to improve..

Are you referring to the Carcavelos training? Has there been another training on data collection? I'm sending you the comments I made regarding the Carcavelos training session on the feedback form...

We have been over and over the indicators. The training session in Carcavelos was a huge disappointment. I have collected data; I have made the indicators calculus. I had questions in the beginning of the meeting and by the end of the meeting I was forced to conclude that whenever concrete questions were asked no one knew exactly:

- the indicators definitions
- if a certain indicator was supposed to be calculated by M2 or M3
- the exact units in which certain indicators are supposed to be provided
- if some of the indicators are supposed to have sub-indicators

I had the feeling I was going to be trained (which did not happen) and by the end of the training session we only concluded that 6 task forces were going to be created in order to provide M1 the answers to the questions we had by then.

After Carcavelos, the list of indicators was altered. New indicators were added while some were subdivided into several new ones this is consequently translated into extra work on data collection as well as on indicator values computation.

Recently, I was informed that there will be a new list of indicators in September and I must confess I hoped that your list (the one on the excel file you've sent) was the "final one". Although when I compared it with the list provided by the M2 module leader during a meeting in Solsona (19-21 Sept. 2007) I realised that the ids of some indicators were different and that the latest list contained about 6 indicators which were not part of your list.

I could not take part in the training in Zvolen.  
Colleagues indicate that the training held in Zvolen was OK.

Training was sufficient for data collection although the extension into a regional case study will significantly increase the level of data we are handling and analysing, as well as increasing the challenge of maintaining the integrity of the data itself (eg—the source of the data). Having an online forum where the various project partners may work together and communicate problems and issues in an informal 'brain-storm' setting may allow for an easier transition into a large-scale regional case study.  
Quarterly meetings, particularly between project partners with similar species FWC, may also be extremely helpful in an effort to maximise and pool resources.

Training not very helpful for data collection in regional cases. It remained the impression that rather the project coordinators on data collection were trained by the collectors and not vice versa.

Training in Lisbon did not meet our expectations. It started the necessary process of indicator definition for a common understanding of our partners, but this was a long lasting process which did not help data collection in due time of the time schedule of the project for the single chains.

Overall comment without using form:

1 furniture data

Non availability of data relating to wood furniture. How to interpret what is available separating wood furniture from non wood furniture or if working from the produced timber side how to separate out the furniture from other items which are lumped together in the databases.

2 Almost all of data in M4 relates to the output not to input so it needs 'converting' for use in ToSIA.

3 Most data bases showing timber products lump together many different components and need 'expert opinion to 'guess/estimate the relative proportions of the products.

4. Employment and salary data are too aggregated and may cover a number of different industries, and again need 'expert opinion' and estimates.

## INDICATOR SPECIFIC FEEDBACK - DATA COLLECTION SINGLE CHAINS

There are still many values missing for the Single chains data collection. Please tell us why values could not yet be delivered (data collection protocol not clear enough? data not available? other reasons (e.g. missing personnel or expertise)?

*Please either provide feedback in specific indicators or sub-classes of indicators here OR (preferably) in the accompanying Excel sheet on specific indicator sub-class feedback.*

<b>FWC Indicator - Single Chain data collection for TOSIA prototype test run</b>	<b>Feedback: Reasons for missing values in indicators, suggestions for improvement of indicators</b>
Gross value added and GDP	Don't understand it very well
Production costs	Data collected. Indicators need to be recalculated because they've been subdivided. Some issues need to be discussed
	Data collected. Indicators calculated but the calculus procedures should be discussed
Employment	Expert guess possible for rural/urban empl.
Wages and salaries	Data collected. Indicators calculated but the calculus procedures should be discussed as well as the data source
Energy generation	Data collected. Indicators calculated but might need to be recalculated because they've been subdivided. Some issues need to be discussed
Greenhouse gas balance	Data collected. Indicators recalculated. Some issues need to be discussed
Resource / material use	Data collected. Indicators calculated but some issues need to be discussed
Occupational safety and health	Available data collected. Indicators calculated with data for the whole country and for a set of activities including agriculture, game, animal production and silviculture dating from 2001. Needs to be discussed
	Data collected. Indicators calculated but the calculus procedures should be discussed
Education and training	Expert guess possible
Distance and load indicator	Data collected. Indicators calculated but the calculus procedures should be discussed as well as the data source
Water use	Don't understand it very well
Trade balance	This indicator was added after November 2006, therefore I didn't calculate it. Although, I'm not sure I'm supposed to, because I can't think of a situation in which it can be applied to M2...(at least for paper/newspaper single test-chain) Can you help me here?
Enterprise structure	Data still needs to be collected in case M2 needs to calculate

	it
	Makes no sense for M2 in the case of Baden-Württemberg
Investment and Research & Development	Data still needs to be collected in case M2 needs to calculate it Expert guess possible
Total production	Data still needs to be collected in case M2 needs to calculate it
Emissions to soil, water and air	Don't understand it very well
Generation of waste	Data collected. Indicators need to be recalculated because they've been subdivided. Some issues need to be discussed
Compliance costs	Data collected. Indicators calculated but the calculus procedures should be discussed
Quality of work	Data collected. Indicators calculated but the calculus procedures should be discussed as well as the data source
Other services to the public including the recreational use of forests	Data collected. Indicators calculated but might need to be recalculated because they've been subdivided. Some issues need to be discussed Not available
Community participation & communication	Data collected. Indicators recalculated. Some issues need to be discussed Not available
Consumer attitudes forestry & products	Data collected. Indicators calculated but some issues need to be discussed Not available
Revenue	Available data collected. Indicators calculated with data for the whole country and for a set of activities including agriculture, game, animal production and silviculture dating from 2001. Needs to be discussed
Innovation	Data collected. Indicators calculated but the calculus procedures should be discussed Not available