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Stocker Group  
THE KNOW HOW COMPANY

## FINAL REPORT

Transfer of and Training on Knowledge Management System  
(KMS) and Integration of the KMS with the Cleaner Production  
Network in Latin America and the Caribbean

Project No: UE/RLA/05/007



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## Index

<b>1 EXECUTIVE RESUME .....</b>	<b>3</b>
<b>2 GENERAL ACTIVITIES DEVELOPED DURING 2007 AND UNTIL FEBRUARY 2008...5</b>	
<b>3 FIRST PERIOD: TRANSFER OF PROGRAMME TO THE NEW RESPONSIBLES IN MEXICO.....</b>	<b>6</b>
3.1 Monthly Newsletters:	6
3.2 Monthly Activity Reports:	7
3.3 General Support:	7
3.4 Technical Support and Server Maintenance:	8
3.5 Transfer of the KMS to the Mexican Center	9
<b>4 SECOND PERIOD: GENERAL PROGRAMME SUPPORT TO THE NEW RESPONSIBLES IN MEXICO .....</b>	<b>10</b>
4.1 Help in Monthly Newsletters:	10
4.2 Supervision of Monthly Activity Reports:	10
4.3 Technical Support and Server Maintenance:	10
<b>5 THIRD PERIOD: INTEGRATION OF THE TECHNICAL UPGRADES OF THE PLATFORM.....</b>	<b>11</b>
5.1 General Support:	12
<b>6 LAST PERIOD: GENERAL SUPPORT, WHERE NEEDED .....</b>	<b>12</b>
<b>7 CONCLUSIONS.....</b>	<b>13</b>

## 1 EXECUTIVE RESUME

The UNIDO Regional Cleaner Production Programme for Latin America and the Caribbean aims at strengthening the national economies in Latin America by means of improving market access in compatibility with environmental protection and social development. The Regional Programme promotes Cleaner Production (CP) and Environmentally Sustainable Technologies (EST), facilitates the exchange of experience and availability of information in Spanish, enhances the establishment of cooperation and fosters the development of joint regional projects. During the Programme execution, a specialist network and working community in CP has been established, integrating 18 National Cleaner Production Centers and Programmes (NCPCs and NCPPs) in 15 different countries in the region.

This has been done by means of a Knowledge Management System (KMS), developed by Stocker Group, which was officially launched on February 8, 2006. This system represents a complete working methodology, supported by an Internet based platform that enables all participating Centres and Programmes to enhance information exchange, share experiences and best practices, and coordinate regional initiatives, in Spanish and Portuguese. Stocker Group has developed this system, based on the special requirements of all participating countries, including their procedures and workflows, which has allowed to integrate the network fluently and to consolidate a common, daily work practice among the different user groups in the different countries.

From its beginning and up to December 2006, the overall project and KMS itself has been accompanied closely by Stocker Group to ensure its perfect implantation according to the given project goals. For the year 2007, the goal has been set to ensure a smooth and complete transfer of the KMS, all its functions and functionalities, and also all technical documentation and the operative manuals, which implied the training of the new administrator, the Mexican Cleaner Production Centre, in all components of the system (methodology of work, contents, communications, technology). This training has been made in May, 2007 and has been accompanied throughout the year until the end of February 2008 by a close coaching in order to guarantee a perfect functioning of the network in the future:

- 1) A permanent contact with the KM promoters, local responsables in charge of coordinating and promoting the platform with the local centre's users.
- 2) Monitoring and close support of expert groups in their validation and certification of best practices in CP.
- 3) Ensure additional general functions important for the good operation and further consolidation of the KMS. Among other, this implied a new development in the existing platform in order to ensure the possibility of opening the access to a broader public. This additional development was implemented and then transferred to the Mexican Centre in December 2007.

The first stage of the present project envisioned the preparation and physical transfer of all KMS components to the new local administrator. Apart of the current monthly activities for the CPLatinNet, which included the edition of the monthly newsletters, an overall monitoring of use of the platforms and its different tools, and the help desk activities, the work of Stocker Group has been oriented towards the following specific activities:

- Document the complete application and all its tools for the different user profiles
- Develop the technical documentation of the KMS platform, including its architecture and data base structure
- Prepare all training activities needed for the new administrators (head of IT, head of Knowledge Management, Designer)
- Transfer the technical application via FTP server to the new servers in Mexico
- Personal transfer of know-how to the Mexican team by two Stocker Group experts (Head of IT, Head of Knowledge Management) during the week of May 21 to 26, 2007.

After this intensive initial transfer, the second stage included a close follow-up and back-office support for the new local responsables in Mexico in all tools, the elaboration of the monthly newsletter and help-desk functionalities to the users of the network. This was made in the technical area as well as in all KM activities.

During the period, the contact was maintained by e-mail and internet conferences.

In a third stage, on behalf of the Directory, alternatives for opening the platform to three levels of users were analysed and developed between September and October, tested together with the UNIDO programe responsables, and finally transferred to the Mexican Centre and liberated to the CP-LatinNetUnido Public in December 2007.

Also, there were monthly backups made of the platform, and the mirror server application updated on the following back-up page: <http://cpml.stockergroup.com>

For the last stage, Stocker Group remained available for consultations and as a back-office, with the good news that no special support was needed by the new platform manager to maintain the platform working without any trouble. This allows to close the present project in the best of conditions.

In the following, all activities of the year will be presented in detail.

## 2 GENERAL ACTIVITIES DEVELOPED DURING 2007 AND UNTIL FEBRUARY 2008

During the indicated project period, the general work responsibilities were distributed as follows:

The Project Leader, was responsible for the perfect development of the overall project activities related with the CPLatinNet KMS and the follow-up activities with the Mexican centre after the formal transfer, including in especial:

- Project Coordination and Reporting in close contact with the UNIDO Project Coordinator in Vienna, sharing of information and feedback, reports.
- Supervision of the KM Expert, the Head of IT, as well as the additional professional staff needed to provide the services and developments defined.
- Permanent monitoring of activities on the platform, analysis and development of propositions to improve and consolidate the network's activities and irradiation further.
- Presentation and discussion of programme milestones and the new developments with the UNIDO responsables.

Respecting Knowledge Management and networking, the main activities of the Head of KM during the period were:

- Document the project components, prepare, train and ensure a successful project transfer to the Mexican responsables.
- Assist the KM responsible, Elisa Arrerola, in the application of the communication and promotion strategy defined throughout the network with the help of the local KM promoters, motivating the recollection of local news, best practices and issues of interest for the internal community and the public opinion in general.
- Support the responsible, where necessary, in the recollection of news and information for the monthly newsletter, compilation, edition and distribution process of this information tool.
- Support the monitoring of KM activities with experts and other user groups.

As for the Head of IT, the following main activities were undertaken:

- Document all technical project components, prepare, train and ensure a successful project transfer to the Mexican responsables.

- > Prepare the platform transfer to Mexico, develop the security and back-up protocols to ensure a perfect functioning and the storage of all contents and know-how of the CP-LatinNet working community.
- > Follow-up with the local responsible respecting his responsibilities and tasks in technology and regular maintenance of the platform, also all tools the application includes, their logic and database structure.
- > Review the result of distribution of the monthly newsletters to all user and expert groups.
- > In the report period, make a physical back-up of the platform on DVD, which is sent to Vienna together with this report.

In the following, the different activities of each period are described in detail:

### **3 FIRST PERIOD: TRANSFER OF PROGRAMME TO THE NEW RESPONSIBLES IN MEXICO**

#### **3.1 Monthly Newsletters:**

During the first semester, all general activities for the network were continued as the previous year. This included the edition of the monthly newsletters in February, March and April.

The newsletter in May was developed in common with the new administrators and was therefore part of the transfer activities, which will be presented in the following chapter. The process of work is as follows:

Each month, according to the yearly communicational guidelines, the KM Expert takes contact individually with each of the local KM promoters, to receive the news and interesting information for the respective newsletter.

The KM Expert makes a first contact to remind the Centers to join information until a certain deadline. Two weeks before the newsletter itself, she contacts the people again to remind them to send their information. Each month, UNIDO writes the head news, which is the central information, accompanied by the rest of the news of CPLatinNet.

Once all news have been collected, the process of editing starts. In many occasions, it is necessary to make an additional contact with the KM promoter in order to complete or complement the information. After the edition, the contents are sent to the UNIDO Project Coordinator, for her revision. At the same time, the work on design starts, in order to make every newsletter unique, including photographic material. Once the contents are approved, they are sent to translation.

The first step is to incorporate the internal news into the platform, by means of the existing *Content Management Tool (CMT)*. Afterwards, the external news are included. All these informations are then combined into the newsletter in html. The final proposal, is sent to the UNIDO Project Coordinator again, for her official ok of the Spanish version. With the example of the Spanish version, the Portuguese newsletter is elaborated.

Between the 8th to 11th of each month, this newsletter is then sent by a massive mailing list to all active users of the CPLatinNet, and is also available on the webpage (external) and the intranet (internal).

### **3.2 Monthly Activity Reports:**

The KM Expert also continued to develop a monthly activity report during this first period, combining the statistical information received through the platform, detecting risk or problem areas. This monitoring was made until the end of April and included the following indicators:

- > Visits to the intranet by periods, Centers/countries
- > Documents downloaded by period, centres
- > Documents uploaded by period, centres
- > News by period and centre

### **3.3 General Support:**

This function consisted in assisting the executive committee with information and advice on important matters related to the use and potential of the platform and its existing tools. In special, during the period, the project team analyzed the possibilities and necessary structure to be implemented in order to open CPLatinNet to a *general interested public*. The structure would be organized in three levels:

- Level 1: Information and contents available for free to all public
- Level 2: Access to selected information, available for members who pay a yearly flat fee
- Level 3: Access to classified information; the download of *technical information* has to be paid specially.

The necessary adaptations to be made, were first presented in a report in March and included:



- Changes in the security and user management system of the KMS, by including sections only accessible after previous payment
- An on-line payment function
- Changes in the document section
- Changes in the statistical section

### **3.4 Technical Support and Server Maintenance:**

During the period, the technical support was maintained as for 2006, including:

#### **1) Platform maintenance:**

- Server maintenance and control of internet connection and speed in order to guarantee adequate technical conditions and infrastructure which allowed the platform to be available permanently. During the whole year, there were no incidents which restricted the work on-line of CPLatinNet.
- Regular periodic backups of the platform and its contents: in addition to its main server, the application is backed-up in a mirror server, where all information and contents are permanently upgraded. Once every three months, these contents are registered and backed-up in CDs, which are stored in different places outside the office in order to ensure a backup in case of an emergency in the office. The complete copies of the system are sent to UNIDO once every three months.

#### **2) Technical help desk:**

- Attention to technical questions on how to use different functions and modules of the platform, orientation of users in these functions and the platform specifications, and other punctual technical requirements.

#### **3) Distribution of monthly newsletter:**

- This task included the preparation of the newsletter layers and stylesheets, according to the corporative image of CPLatinNet and new contents. Together with the designer, each month, banners and images were designed and/or adjusted according to the contents of the month, and headings. Once the newsletter is compiled and has been accepted, it is tested and only then sent to all users by means of a massive mailing functionality on the General Administrator. The Head of Development monitors and guarantees the due distribution of the mails to the different Centres and all active users.

### 3.5 Transfer of the KMS to the Mexican Center

From the end of March on, a regular contact was established with the new KMS administrators in Mexico in order to know their infrastructure and resources in detail, being able to design an accurate transfer process, which was put into place in the third week of May.

During this period, on one side, all documentations and training activities were prepared at Stocker Group, on the other side, important supporting elements were gradually installed in Mexico to support the transfer and following operations of the KMS platform from its new location. The complete technological application was transferred to the local servers in Mexico at the beginning of May, waiting to be updated and made functional with the visit of the Head of IT between May 21 to 26.

Documentation handed out, included:

- > Manual of the General Admin
- > Manual of Experts (validation of documents)
- > Manual of Users
- > Technical Handbook of the application
- > CDS and DVDs with backups and codes of the last version of the application

For the week between May 21 and 26, the Head of IT and Head of KM traveled to Mexico to work directly with the local team, training the new responsables in their task and ensuring a perfect operation of the locally installed platform for the CPLatinUnido Network.

Some problems in infrastructure and resources had to be resolved during the first two days, but then, the transfer could be executed perfectly with all capacities working perfectly from Mexico.

This allowed the new administration team to edit and send the monthly newsletter of May directly from the Cleaner Production Center. From that point on, the KMS has been working from the servers in Mexico, existing a mirror application in Chile in case there would be a problem.

#### **4 SECOND PERIOD: GENERAL PROGRAMME SUPPORT TO THE NEW RESPONSIBLES IN MEXICO**

During this period, the general activities were increasingly assumed by the Mexican programme responsables, with a close support first from Stocker Group, which could gradually be loosened in the programme period. Support activities included:

##### **4.1 Help in Monthly Newsletters:**

From June on, the Mexican Centre assumed the responsibility of editing the newsletter, which was accompanied in a very close way during the first three month until August.

In the report period, Elisa Arrerola managed the whole process in a highly autonomous and satisfactory way, needing only some punctual follow-up from Stocker Group. Still the KM expert was always available for advice on contents and proceedings.

##### **4.2 Supervision of Monthly Activity Reports:**

The new Mexican KM Expert also started developed the monthly activity report independently, which included combining the statistical information received through the platform, detecting risk or problem areas. From June on, Elisa Arrerola sent the statistical reports to Vienna directly, including the following indicators:

- > Visits to the intranet by periods, Centers/countries.
- > Documents downloaded by period and centres: this indicator refers to expert documentation in 8 special areas, which is accessible for the experts and consultants in the network, in order to share best practices in Cleaner Production among countries. These documents have previously been validated by a group of experts from the same specialization and therefore constitute a valuable working tool for consultants of the centres.
- > Documents uploaded by period and centres.
- > News by period and centre.

##### **4.3 Technical Support and Server Maintenance:**

During the period, the technical support was maintained according to the terms of reference by the new local responsible, with back-up from the IT expert of Stocker Group, which included:

1) Platform maintenance:

- Server maintenance and control of internet connection and speed in order to guarantee adequate technical conditions and infrastructure which allowed the platform to be available permanently.
- Regular periodic backups of the platform and its contents: in addition to its main server, the application was backed-up in a mirror server, where all information and contents were permanently upgraded. Once every month, the current version was uploaded to <http://cpml.stockergroup.com> and every three months, these contents were registered and backed-up in CDs, which were stored in different places outside the office in order to ensure a backup in case of an emergency in the office, among them one of the system was put into the hands of UNIDO.

2) Technical help desk:

- Attention to technical questions on how to use different functions and modules of the platform, orientation of users in these functions and the platform specifications, and other punctual technical requirements.

3) Distribution of monthly newsletter, which was managed by the Mexican centre without any problems from June on:

- This task includes the preparation of the newsletter layers and stylesheets, according to the corporate image of CPLatinNet and new contents. Together with the designer, each month, banners and images are designed and/or adjusted according to the contents of the month, and headings. Once the newsletter is compiled and has been accepted, it is tested and only then sent to all users by means of a massive mailing functionality on the General Administrator. The new Head of Development monitors and guarantees the due distribution of the mails to the different Centres and all active users.

## 5 THIRD PERIOD: INTEGRATION OF THE TECHNICAL UPGRADES OF THE PLATFORM

Respecting the KM activities in this period, Elisa Arrerola had already assumed the following tasks in an autonomous way:

- Editing news and creating the newsletter by means of the HTML code, editing photos by means of the Photoshop software and Dreamweaver.
- Joining and analyzing the statistical data on the platform, in order to develop the monthly activity reports.
- Creating new document folders, and giving access to new users.

- Control of document certification, in special the normalization of documents waiting to be certified.

As a result, the support by Stocker Group to the Mexican Centre was more focused on ensuring a perfect integration of the new developments made to improve the programme efficiency.

### 5.1 General Support:

This function consisted in assisting the executive committee with information and advice on the new development made for the platform, which included:

- Changes in the security and user management system of the KMS, by including sections only accessible after previous payment
- Changes in the document section
- Changes in the statistical section

The on-line payment function was not implemented.

These functionalities were all developed until the end of September, then tested, and later on released to the Programme Coordinator and Directors. Several bugs were fixed and updates made, leaving the application ready on the Stocker server. Once the teal got the formal ok from Vienna, the upgrades were transferred into the application of the Mexican Centre.

In December 2007, the updates were finally uploaded on the Mexican server, and appeared to the public in the first days of January 2008. The Mexican staff were trained for the changes, so they were able to manage the changes with a short support from Stocker Group.

The new additional tools for the platform, will allow a first step to opening the application to a broader public, enhancing the international presence and corporate image of the CPLatinNet.

## 6 LAST PERIOD: GENERAL SUPPORT, WHERE NEEDED

From January 2008 on, the support of Stocker Group to the Mexican responsables was back-office support: respond to punctual requirements, help with advice, overview the overall activities to ensure their perfect functioning.

Thanks to the gained competences and know-how of the Mexican team throughout 2007, all activities worked out in a smooth and autonomous way during this last period, wich is the best guarantee for a fluid and effective work of the CP-LatinNet community with their experts and the public in general.

## 7 CONCLUSIONS

At the end of this last project period, all project activities have taken place in the framework and conditions given. All network activities have worked well during the present year, relaying now completely on the Mexican centre. The process of transfer of the KMS application to the new administrators in Mexico, thanks to a close follow-up period, has worked out as defined. The Mexican responsables have assumed their responsibilities, with highly positive results. This allows to respect the final transfer deadlines perfectly.

For these months still, the KMS was managed in a backup version in Chile. From March on, the new administration team will be perfectly able to ensure smooth and fluid operations supporting their good management in all tools and applications of the KMS.

At this stage, the new application responsables have shown their condition to manage the programme on their own, without any further support of Stocker Group.

On the other hand, the fact that Stocker Group assumed the development of the platform updates in this transfer period was also positive. The division of tasks allowed the Mexican Centre to concentrate on and consolidate their administrative functions. In a next occasion, the new programme responsables will be in condition to assume general development tasks, too.