



Audit conclusion from audit no.

14/12

Management of the state property and state funds allotted to the projects concerning IT and communication technology at the Ministry of the Environment

The audit was included in the audit plan of the Supreme Audit Office (“SAO”) for 2014 under number 14/12. The audit was managed and the audit conclusion drawn up by SAO member Ing. Jan Vedral.

The aim of the audit was to scrutinise Management of the state property and state funds allotted to the projects concerning IT and communication technology (“ICT”) at the Ministry of the Environment.

The audit took place from April to October 2014.

The audited period was 2010 to 2013; where relevant, the preceding and following periods were also scrutinised.

Audited entities:

Ministry of the Environment;
CENIA, Czech Environmental Information Agency;
Czech Hydrometeorological Institute.

The objections lodged against the audit protocols by the Ministry of the Environment and by CENIA, the Czech Environmental Information Agency, were dealt with by the head of the audit team by means of decisions on objections. No appeals were lodged.

At its 1st session held on 19 January 2015 the SAO Board issued resolution no. 11/I/2015 **approving** the **audit conclusion** worded as follows:

I. Introduction

Under Act No. 2/1969 Coll.¹ the **Ministry of the Environment** (hereinafter also referred to as the “MoE”) sees to and manages an Integrated environmental information system (“IEIS”), including blanket monitoring throughout the Czech Republic, and does so in connection with international treaties. By an agreement on delegation, since 2010 the MoE has transferred selected activities and powers of the MoE in connection with the IEIS to CENIA, the Czech Environmental Information Agency.

CENIA, the Czech Environmental Information Agency, (“CENIA”) is an organisation of the MoE co-funded by the state budget. According to its founding deed, CENIA is inter alia tasked with operating and completing an integrated environmental information system, including validating primary data and performing information synthesis.

The **Czech Hydrometeorological Institute** (“CHMI”) is an organisation of the MoE co-funded by the state budget whose fundamental purpose is to perform the function of a central state institution of the Czech Republic for the fields of air purity, hydrology, water quality, climatology and meteorology, providing objective and expert services primarily for the state administration.

The audited entities registered a total² of CZK 570,980,709 in fixed intangible assets (“FIA”) on selected synthetic accounts³ as at 31 December 2010 and a total of CZK 733,855,225 as at 31 December 2013. Annex 1 presents the FIA broken down by audited entity for the years 2010 to 2013.

The audited volume of finances for the 2010–2013 period comprised money spent on the audited information systems (“IS”): in the case of the MoE the total amount was CZK 112,007,403; in the case of CENIA a total of CZK 80,623,596; and in the case of the CHMI a total of CZK 42,332,019.

The purpose of the IEIS is to acquire, administer and assess data and provide information in the field of the environment. The IEIS administers data that are partly taken from external entities and partly acquired through the IS operator’s own work.

As at 31 December 2013 the MoE had the IEIS which comprised a total of 125 information systems in the environment department. These systems are architecturally designed, implemented and operated as separate information systems without direct integration into a joint reference environment. The audited IS are described in Annex 2. Expert support for the development and operation of the IEIS was supposed to be provided by the IEIS Project Steering Committee (“the Committee”).

¹ Act No. 2/1969 Coll., on the establishment of ministries and other central organs of the state administration of the Czech Republic, as amended.

² Gross state.

³ 013 – *Software*, 014 – *Quantifiable rights*, 018 – *Petty fixed intangible assets*, 019 – *Miscellaneous fixed intangible assets*, 041 – *Fixed intangible assets in process*.

The Committee was supposed to give expert opinions, mainly on the state's environmental policy, information strategy, action plan, information concept and activities that have a horizontal impact on the IEIS.⁴ The Committee was established by order of the minister of the environment in 2009.⁵ The order also laid down the Committee statutes governing its powers and the composition and the rights and obligations of Committee members. The Committee stands outside the organisational structure of the ministry apparatus. It is composed of representatives of the MoE and departmental organisations and has significant powers in coordinating the IEIS.

NB: All the legal regulations mentioned in this audit conclusion are applied in the wording effective for the audited period.

II. Summary of the principal audit findings

- The IEIS is more of a theoretical concept than an integrated information system. Consequently, the MoE has not fulfilled its obligation to see to and manage the IEIS according to Act No. 2/1969 Coll. The environment department currently uses 125 separate information systems and databases.
- The MoE failed to make sure that the IEIS Project Steering Committee, as the main expert coordinating body, fulfilled its obligations as laid down in its statutes. The Committee did not meet once from 2010 to 2012 and did not issue the appropriate expert opinions on strategic activities of the environment department.
- Fundamental project-management documents did not contain a duty to draw up a feasibility study analysing possible alternative solutions, as a result of which the MoE could not be certain that it was implementing the most advantageous and most economical alternative.
- Data were stored multiple times in various information systems, which resulted in a need for greater storage capacity for the stored data and in the consequent increased operating costs.
- The audit found that the only project (SIRIUS) through which the MoE went some way towards implementing the IEIS was cancelled without a replacement, resulting in the uneconomical and ineffective spending of CZK 21 million.
- Data in the selected and substantively related information systems were found to be incompatible. Remedying this state of affairs will require additional spending.
- The audit confirmed that certain information systems continue to be contractually dependent on a single contractor, which leads to the risk that the public tender will not be executed in the most economical manner.

⁴ Horizontal impact - cutting across the entire environment department.

⁵ Order of the Minister No. 26/2009 of 30 October 2009, ref. no. 4729/M/09 85872/ENV/09.

- The MoE does not keep track of access to the individual information systems. Consequently, it cannot evaluate the economy, efficiency and effectiveness of spending linked to the use of the IS.
- This audit field was already scrutinised by the SAO in audit no. 07/16. Even though the MoE subsequently adopted remedial measures, a considerable proportion of the shortcomings persists.

III. Detailed information on the principal findings

The rights and obligations linked to the creation, use and development of public administration information systems are laid down by Act No. 365/2000 Coll. The act defines a fundamental assessment criterion determining which information systems are public administration information systems ("PAIS").⁶ At the same time it is the basic legal regulation establishing the term "information concept".

The Ministry of the Environment has several strategic documents elaborating the goals and objectives of the environment department at various levels of management. At the top level of management the environment department's work is based on the approved state environmental policy ("SEP"). One permanent component of this periodically updated material is the chapter entitled *Environmental Policy Implementation Tools*, which contains a section called *Information Tools*.

Other strategic documents include:

- information strategies ("Strategies") - strategic plans of the environment department's long-term focus in the field of providing information support, sources of information, services and technologies. The purpose of the Strategies is to provide optimal support for the MoE's work and internal processes by means of suitably deployed information technology tools;
- *Concept of the Integrated Environmental Information System* ("IEIS Concept") - the concept of the development and operation of the IEIS, which is the overarching platform of the information systems operated in the environment department for the purpose of collecting and assessing data on the environment;
- information concept ("IC") - describes the architecture of the information systems in the environment department. The first layer comprises IS that come under the IEIS and are composed of public administration information systems and specialised IS that do not come under the IEIS. The next layer contains IS which, based on their purpose, are characterised as PAIS under Act No. 365/2000 Coll., but the data processed in these IEIS do not satisfy the IEIS criteria (they do not concern environmental issues). The last layer (operational information systems) represents ancillary information systems of the given organisation. This layer consists of IS that see to the internal operation of the organisation in question and are not directly linked to the exercise of public administration.

⁶ Act No. 365/2000 Coll., on public administration information systems and amending certain acts, as amended.

Integrated Environmental Information System

The IEIS is more of a theoretical concept than an integrated information system. Consequently, the MoE has not fulfilled its obligation to see to and manage the IEIS according to Act No. 2/1969 Coll. The environment department currently uses 125 separate information systems and databases.

The MoE has not defined in any strategic document criteria for assessing whether the environmental information system is “integrated”, criteria that information systems incorporated into the IEIS should satisfy so that a truly integrated IEIS is built up. The main strategic document, *State Environmental Policy for the Years 2012 to 2020*, makes minimal mention of the term “IEIS” and any mention was not in a context providing any meaningful information on the development of the IEIS as a whole in the context of the SEP’s objectives and priorities. The integrated character of the information system was supposed to be derived primarily from a uniform base of data. Ever since it was constituted in the Competences Act⁷, the IEIS was developed without any link to a uniform base of data. The upshot was an increase in the number of information systems until they reached the present number of 125. In data terms the system is incompatible and there is multiple storing of data in various information systems and different databases. The MoE failed to arrange and manage the IEIS adequately.

IEIS Project Steering Committee

The MoE failed to make sure that the IEIS Project Steering Committee, as the main expert coordinating body, fulfilled its obligations as laid down in its statutes. The Committee did not meet once from 2010 to 2012 and did not issue the appropriate expert opinions on strategic activities of the environment department.

The IEIS Project Steering Committee was supposed to provide expert support for the development and operation of the IEIS. The audit found, however, that it did not act in compliance with its statutes and was therefore unable to influence the development of the IEIS.

- a) The Committee did not discuss the SEP for 2012-2020 and therefore could not lodge an objection that one key project, *SIRIUS*, was not included in the SEP. SIRIUS means the System for the Integration and Management of Information in the Field of the Technical Protection of the Environment (see below) and has a horizontal impact on the IEIS.
- b) The Committee was responsible for complying with information strategies and achieving their objectives. The SIRIUS project was part of the Strategy for 2011-2014. The Committee’s minutes show that it did not discuss the problems affecting SIRIUS from the Committee’s establishment in 2009 to July 2010 and gave no opinion on the project’s termination ahead of schedule. The Committee did not meet at all from July 2010 to June 2012.
- c) The Committee dealt with the question of the definition, content and focus of the IEIS several times at its sessions, but it never raised the issue of the fundamental need to

⁷ *The IEIS was already mentioned in Act No. 2/1969, on the establishment of ministries and other central organs of the state administration of the Czech Republic.*

define the criteria of the IEIS with regard to the uniformity of data in the environment department and to modify the IEIS Concept document in this regard.

- d) The Committee gave no opinion on the duplication of storing data in various IS (see below). This is a question of data entering the environment department via the *Integrated System for Fulfilling Reporting Duties* (“ISFRD”) and also stored in the *Integrated Waste Management Information System* (“IWMIS”), the *Register of Emissions and Air Pollution Sources* (“REAPS”) and the *Integrated Pollution Register* (“IPR”).
- e) The Committee failed to discuss the issue of a change in the database structure in the *System of Records of Contaminated Sites* (“SRCS”), which was one of the reasons for the database’s incompatibility with the database structure of the *National Inventory of Contaminated Sites* (“NICS”). If the NICS project is launched, money will have to be spent on making the databases compatible (see below).
- f) The Committee discussed the standardisation of templates for the project objectives and investment objectives of ICT development (e.g. feasibility studies). It never raised the comment, however, that there was a fundamental lack of processes for analysing possible alternative solutions in terms of the cost and quality of the achievement of the objectives, including the existence of a document that would evaluate possible alternatives.
- g) In addition, the Committee did not give an opinion on the directives relating to project management in the environment department or the project management methodology.

Project management - feasibility studies

Fundamental project-management documents did not contain a duty to draw up a feasibility study analysing possible alternative solutions, as a result of which the MoE could not be certain that it was implementing the most advantageous and most economical alternative.

In the audited period of 2010 to 2013 the MoE possessed fundamental project documents (directives, project management methodologies etc.) that also covered ICT projects, but these documents did not lay down a duty to draw up feasibility studies as a basis for decisions on which alternative solution will be adopted from the point of view of time, cost and other considerations. The absence of any feasibility studies covering alternative solutions means that the MoE cannot be certain that it is implementing the most effective solution in the most economical manner. In addition, the project documents contained no link to the IEIS Project Steering Committee when assessing project objectives, at least with a horizontal impact on the IEIS. This excluded the IEIS Project Steering Committee from providing expert support for the development of the IEIS when alternative solutions were being assessed and implemented.

In the transition from the *Reporting Centre IS* to the ISFRD, for example, although a feasibility study was drawn up by an external consultancy firm this study did not contain any comparison of alternatives. The feasibility studies concerning information systems intended to ensure that the most advantageous solutions were selected, including an assessment of their cost, only dealt with one possible solution that was subsequently implemented.

Issue of data overlaps in information systems

Data were stored multiple times in various information systems, which resulted in a need for greater storage capacity for the stored data and in the consequent increased operating costs.

The data obtained from reporting organisations by means of primary reporting are stored both in the ISFRD and in information systems connected to it. The investment costs of the ISFRD in the years 2010 to 2013 amounted to CZK 76,681,611, with non-investment costs standing at CZK 9,487,866. If data need to be corrected, the corrective reports are stored as many times as the correction was performed. This means that the same data were stored multiple times in various information systems, which results in a need for greater storage capacity for the stored data and in the consequent increased operating costs. It is clear from this that the Committee did not fulfil its role as an expert advisory body and that the MoE therefore permitted a state of affairs whereby multiplicity of stored data exists in the environment department.

For example, pollution reports passed on to the information systems via the ISFRD are stored in the ISFRD - this comprises information on air, water and soil pollution, on waste generation, the disposal of electrical devices and records of derelict automobiles in the relevant facilities. These reports are then validated. If shortcomings are found in the submitted reports, they are submitted again by the reporting organisation with the corrected data. Data are validated upon entry to the ISFRD system by means of validation checks on the server, or in some cases before entry to the ISFRD system by means of validation checks in the reporting form itself; reports may be corrected on the initiative of the reporting organisation if it notices an error in the sent data or if the error is pointed out to it by the verifier (who requests that the data are corrected).

- Reports corrected in this manner and re-sent to the information systems via the ISFRD are also stored in the ISFRD.
- The ISFRD therefore stores both the primary reports and all subsequent corrected reports.
- All the reports (both primary and corrected) are downloaded by the information systems (IPR, REAPS, WMIS).
- Consequently, the resultant corrected data are stored both in the ISFRD and in the other information systems (IPR, REAPS, WMIS), including the previous invalid versions.
- Reports for publication in the IPR are stored in the ISFRD and, after subsequent validation, are also stored in the IPR database when published on the IPR web site.

The multiple storing of data in selected information systems was supposed to be eliminated by the SIRIUS project.

SIRIUS - cancelled project

The audit found that the only project (SIRIUS) through which the MoE went some way towards implementing the IEIS was cancelled without a replacement, meaning that CZK 21 million was spent uneconomically and ineffectively.

The aim of SIRIUS, which was implemented by CENIA, was to create not just a single access point for entering data but also a single point of access to these data for the requirements of various bodies of state administration. The concerned bodies were supposed to get access both to timely and precise data published in geographical and substantive contexts and to a set of professional tools for further analytical work with these data. The proposed project was intended to take the place of several information systems and databases that function as tools for processing data concerning the technical protection of the environment and, in some cases, related data. Today these systems mostly function separately and their mutual compatibility is not assured. The SIRIUS project was meant to make data processing for the requirements of decision-making processes for both national and international reporting more efficient. This would have eliminated the multiple storing of the same data in multiple information systems.

Right from the start in 2010 the SIRIUS project was dogged by delays caused mainly by the MoE's slow approval of public tender documentation. Further delays were caused by the poorly elaborated candidates' bids CENIA received. Missing information had to be demanded for some bids and in some cases the required documents were not supplied. Four smaller public tenders gradually took place and contracts were signed with the selected candidates. The problem arose with the biggest and most important planned public tender entitled *VZ/04 - Design, Implementation and Support for the Sustainability of the SIRIUS Information System*: a procurement procedure was undertaken, but it was subsequently cancelled on the grounds of planned organisational changes in the environment department (the merging of CENIA and the CHMI, which never materialised), and the procurement procedure was re-run after the tender documentation was reworked.

In the project timetable CENIA set a deadline of 22 July 2013 for the conclusion of a contract with the selected candidate bidding in the VZ-04 tender for the SIRIUS project so that all the conditions for drawing down finances from the *European Regional Development Fund* would be met. Three bids were received in the VZ-04 tender, but the need to demand additional information presented a real risk that as many as two of the candidates would be excluded and the tender subsequently cancelled. That would have resulted in the 22 July 2013 deadline not being met, so CENIA decided to drop the project. The project was prematurely cancelled by a decision taken at a meeting of the MoE leadership as of 31 July 2013 on the grounds that the project's aims were not achieved.

From 2010 to 2013 CENIA spent CZK 21,007,748 on the SIRIUS project, CZK 12,269,872 of which came from the *European Regional Development Fund* and CZK 2,165,282 from the MoE budget heading. The remaining CZK 6,572,594 came out of CENIA's own resources. After the project was cancelled, CENIA was obliged to return the sum of CZK 12,269,872 that was spent on the project from the *European Regional Development Fund*. The obligation to return the money was confirmed by a tax inspection performed at the instigation of the Ministry of the Interior and the Ministry for Regional Development. In response to a notice from the programme administrator this money was returned on 18 October 2013.

The cancellation of the SIRIUS project meant that the multiplicity of data storage was not eliminated and IS data in the environment department remained non-uniform. It is currently not expected that the SIRIUS project will be revived in the near future. CENIA has not kept

the partial outputs from the SIRIUS project, so they cannot be used for any possible equivalent project in the coming years. For these reasons CENIA's spending of finances utilised on the executed part of the project was uneconomical and ineffective.

Database incompatibility

Data in the selected and substantively related information systems were found to be incompatible. Remedying this state of affairs will require additional spending.

Database incompatibility was detected between the SRCS database of the MoE and the nascent NICS database of CENIA. The NICS was intended to be a complete database of information on contaminated and potentially contaminated sites. The SRCS database was the basic source of data for the NICS. When partial data sources were being transformed into the NICS central database, it was mainly the SRCS data from records of contaminated sites as at 6 November 2009 that were used. The data transformation was completed on 30 June 2010, according to the project documentation. A test of the system was performed in August 2010 by comparing the data from the original SRCS database submitted by the MoE as at 6 November 2009 with the transformed data in the NICS central database. The test found that the compared data were compatible.

During the transformation of data into the NICS, not only were data in the SRCS database in the form as at 6 November 2009 updated, its structure was also changed, which resulted in the SRCS and NICS databases being incompatible. The MoE informed the contractor of the 1st stage of the NICS project about this change during 2011. By that time, however, the data from the original SRCS records had already been transformed into the NICS data repository, so it was not possible to react to this change without modifying the project for the 2nd stage of the NICS and without additional spending. A sum of CZK 1,294,560 was earmarked in the budget of the still pending 2nd stage of the NICS project for eliminating this incompatibility.

The NICS project was a horizontal project, i.e. a project cutting across the entire environment department. For that reason it was a mistake that the project design and any complications were not discussed by the Committee. The database incompatibility that has occurred is not just a deficiency in the Committee's approach but, above all, a deficiency at the level of project management in the environment department and in the processing of the transferred information on the part of CENIA. The situation as a whole is also linked to the fact that the financing of the SRCS was performed by the administrator of the budget of the MoE's environmental risks and ecological damage division instead of using central decision-making on the development of the IEIS within the framework of the MoE's information technologies division, as laid down by the MoE's directives.

De facto dependence on a single contractor

The audit confirmed that certain information systems continue to be contractually dependent on a single contractor, which leads to the risk that the public tender will not be executed in the most economical manner.

Elements of “vendor lock-in”, i.e. the consequences of de facto dependence on a single contractor, can be detected in the audited public tenders of the MoE and CHMI concerning information systems.

The *Integrated Pollution Register and Reporting Centre* (“RC”) information systems and subsystems were created by the same contractor, which, as their sole author, is the sole copyright holder. The MoE announced a public tender to unify reported data on environmental pollution. This involved a widening of the data updating and functionalities of the existing IPR and RC systems and subsystems. Any intervention in the IPR and RC and their subsystems by another entity would constitute a violation of copyright.⁸ Under the provision of Section 34 of Act No. 137/2006 Coll., on 31 July 2006 the MoE invited the original contractor to negotiate in negotiated procedure without publication. The contractual price was CZK 8,324,050 including VAT.

Negotiated procedure without publication declared by the MoE also preceded the conclusion of a contract for a job of work worth CZK 229,719 including VAT. One aspect of this contract was the performance of the service of exporting the data from the RC necessary for preserving continuity in the ensuing system.

After acquiring the RC and IPR information systems in 2004 and 2005 the MoE used negotiated procedure without publication to conclude contracts affecting the information systems. It did so with reference to the protection of sole rights.⁹ The MoE included no provisions on the protection of sole rights in the contracts, so it could not be certain that it was implementing public tenders in the most economical manner. Cooperation with this contractor was terminated in 2010.

In a contract for a job of work for the creation of software for the primary processing of data on surface waters, the performance of which contract displays the features of a job of work within the meaning of Act No. 121/2000 Coll., the copyright act, the CHMI did not include provisions governing the provision of rights linked to the protection of intellectual property affecting the job of work in question. The contractual price was CZK 420,000 including VAT. This is primarily a question of authorisation to copy, publish, modify, process and translate the results of the development of the application software and to combine this job of work with another job of work and to make them part of a compilation. Furthermore, the CHMI did not oblige the contractor to grant the CHMI the authorisation, based on the intellectual property rights, to update, modify and adjust the development results on the basis of an open tender procedure pursuant to Act No. 137/2006 Coll.

If the selected contractor becomes unable to deliver the required services, there is a danger that both audited entities will have to build a new information system from scratch.

⁸ Act No. 137/2006 Coll., on public procurement.

⁹ The provision of Section 23 (4) (a) of Act No. 137/2006 Coll.

Utilisation of information systems

The MoE does not keep track of access to the individual information systems. Consequently, it cannot evaluate the economy, efficiency and effectiveness of spending linked to the use of the IS.

Monitoring the use of IS is an auxiliary method for discovering the degree to which the developed IS are actually used and thus for evaluating the economy, efficiency and effectiveness of spending. The audit found that requirements for monitoring access to the information systems either do not exist at all or do exist but are not followed or, in some cases, are followed but no record is kept of the results. To sum up, the MoE does not have records of the degree of use of the IS in most cases. In this regard the MoE is not even able to employ this method of evaluating the economy, efficiency and effectiveness of spending linked to the use of the information systems.

Implementation of remedial measures in connection with audit no. 07/16.

This audit field was already scrutinised by the SAO in audit no. 07/16. Even though the MoE subsequently adopted remedial measures, a considerable proportion of the shortcomings persists.

The IEIS-related findings of the SAO's audit no. 07/16 were:

- The IEIS is more of a theoretical concept than an integrated information system.
- The IEIS is a "virtual" set of data, information, infrastructure and management that comprises all non-operational information systems operated by the MoE and its subordinate organisations.
- Some of the IEIS information systems are connected to each other, but the IEIS as a whole is not interconnected.
- The IEIS is a set of relatively separate information systems and databases. These systems are not connected.

In response to the SAO audit no. 07/16 the MoE adopted measures to eliminate the identified shortcomings so that the development of the IEIS would be managed uniformly and centrally:

- It set up the IEIS Project Steering Committee as an advisory body that was supposed to provide expert opinions on strategic materials, IEIS concepts and IEIS horizontal projects.
- It launched the SIRIUS integration project, which was supposed both to integrate certain important information systems and, most notably, to make it possible to share data.
- It issued guidelines for project management, including a project management methodology.
- In these guidelines the MoE stipulated that ICT financing would be fully within the authority of the information technologies division.

However, these measures were to all intents and purposes not implemented in a number of cases or were not complied with in a way ensuring that they actually achieved the originally intended purpose:

- The Committee did not meet once from July 2010 to June 2012, so the organisational oversight of the development of the IEIS and supervision of horizontal projects was compromised. As a result, the problems that ultimately led to the termination of the SIRIUS integration project were not discussed in time at this level.
- The Committee did not discuss the project management directive or the project management methodology, so it could not flag up the absence of processes and documents for assessing alternative solutions with a view to ensuring economical spending.
- Via CENIA, the MoE partially implemented the SIRIUS integration project that would have both led to a reduction in the number of information systems and enabled the sharing of data coming into the environment department. This project was supposed to be a major factor in putting the IEIS on the road towards an integrated database. In failing to complete this project, however, the MoE went back to having fragmented information systems in terms of both applications and data.
- The MoE issued guidelines for project management, including methodologies. It also created a single central point for the collection of project objectives. However, the feasibility studies completely overlooked the need to draw up analyses of various alternative solutions and thus to put in place the right conditions for economical spending on projects.
- The decision to fund ICT projects from the sub-budget of the information technologies division gave rise to the assumption that there would be supervision over the development of the IEIS and the possibility of steering this development. It was found, however, that this procedure was not always followed, as a result of which the development of the IEIS was compromised in terms of the compatibility of both the applications and the data of the information systems being created.

The MoE declared that it had adopted certain remedial measures to ensure that the development of the IEIS was managed uniformly and centrally. However, these measures were not implemented in a number of cases or were not complied with in a way ensuring that they actually achieved the originally intended purpose.

List of abbreviations:

CENIA	CENIA, Czech Environmental Information Agency
CHMI	Czech Hydrometeorological Institute
Committee	IEIS Project Steering Committee
FIA	Fixed intangible assets
ICT	Information and communication technology
IC	Information Concept
IPR	<i>Integrated Pollution Register</i>
IS	Information system
IWMIS	<i>Integrated Waste Management Information System</i>
ISFRD	<i>Integrated System of Fulfilling Reporting Duties</i>
PAIS	public administration information system
IEIS	Integrated Environmental Information System
IEIS Concept	<i>Concept of the Integrated Environmental Information System</i>
MoE	Ministry of the Environment
NICS	<i>National Inventory of Contaminated Sites</i>
RC	<i>Reporting Centre</i>
REAPS	<i>Register of Emissions and Air Pollution Sources</i>
SAO	Supreme Audit Office
SRCS	<i>System of Records of Contaminated Sites</i>
SIRIUS	project to build an information integration and management system in the field of the technical protection of the environment (cancelled)
SEP	State Environmental Policy of the Czech Republic
The Strategies	information strategies
VZ	<i>veřejná zakázka</i> (public tender)

**Overview of Fixed Intangible Assets on Selected Synthetic Accounts of the Audited Entities
in the Audited Years**

Table 1 - Selected Fixed Intangible Assets Accounts (CZK)

AE	Gross state as at 31.12.2010	Gross state as at 31.12.2011	Gross state as at 31.12.2012	Gross state as at 31.12.2013
013 – Software				
MoE	97,616,415.60	82,288,146.20	84,328,530.00	91,977,680.10
CENIA	10,092,748.27	9,732,797.77	9,732,797.77	111,409,254.23
CHMI	153,252,425.30	156,071,601.30	173,000,938.30	167,496,604.06
014 - Quantifiable rights				
MoE	38,445,514.83	42,367,644.29	43,603,644.29	45,226,549.29
CENIA	3,473,417.50	3,473,417.50	3,473,417.50	3,473,417.50
CHMI	0.00	0.00	0.00	0.00
018 - Petty fixed intangible assets				
MoE	11,223,127.78	11,878,245.95	12,621,207.36	10,541,826.43
CENIA	1,683,465.07	1,661,779.54	1,711,247.54	1,744,271.85
CHMI	34,971,441.46	34,777,757.87	34,960,589.91	35,494,332.83
019 - Miscellaneous fixed intangible assets				
MoE	50,302,326.70	62,129,318.70	68,093,742.70	69,331,442.70
CENIA	0.00	0.00	0.00	0.00
CHMI	0.00	0.00	0.00	0.00
041 - Fixed intangible assets in progress				
MoE	0.00	0.00	0.00	0.00
CENIA	165,840,509.31	244,953,623.76	291,096,797.70	194,508,368.23
CHMI	4,079,317.00	12,367,068.00	5,412,082.00	2,651,477.65

Source: accounting records of the audited entities

NB: AE - audited entity

Description of the Audited Information Systems Mentioned in the Audit Conclusion of Audit No. 14/12

RC - the *Reporting Centre* was a communication interface between reporting organisations and state authorities and possibly other concerned entities. It was an information system collecting reported environmental data. The RC was designed as an information input channel for the entire environment department.

IPR - the *Integrated Pollution Register* is a publicly accessible information system of public administration. This register lays down a list of substances whose emissions and transfers users of the registered substances are obliged to identify, assess and report to the MoE. The reporting duty of economic entities is enshrined in the environmental legislation.

WMIS - the *Waste Management Information System* is a nationwide database information system containing data on the generation and disposal of waste and data on facilities for the modification, utilisation and elimination of waste. The reporting duty of economic entities is enshrined in the environmental legislation. The data assembled in the WMIS are not publicly accessible: they are mainly intended for experts familiar with the applicable legislation for waste management.

ISFRD - the *Integrated System of Fulfilling Reporting Duties* is the successor system to the RC. The ISFRD is a public administration information system that handles the receipt and processing of mandatory environmental reporting data (information about air, water and soil pollution, records of waste and, for example, on the disposal of electrical devices and records of derelict automobiles in the relevant facilities) in electronic form and the further distribution of the reports to the relevant public administration bodies. The purpose of collecting this information is to protect and improve the quality of the environment. The reporting duty of economic entities is enshrined in the environmental legislation.

NICS - the *National Inventory of Contaminated Sites* was supposed to be created for gathering and evaluating information on old ecological burdens, most notably information from ecological audits linked to privatisation projects and from salvage projects paid for within the framework of the state's guarantees for these environmental hotspots created before privatisation.

REAPS - the *Register of Emissions and Air Pollution Sources* is used to store data on stationary and mobile sources of air pollution. It is a database that handles the processing, checking and archiving of data on separately recorded stationary sources of pollution and their emissions parameters and data on emissions of collectively monitored sources, which include household heating, road transport etc.

SRCS - the *System of Records of Contaminated Sites* handles the administration of data for providing and for updating territorial analytical materials; it contains records of localities where old ecological burdens created before privatisation are being eliminated and localities for which subsidies were or will be provided out of the *Environment* operational programme.

The database contains records of localities contaminated with persistent organic pollutants, or POPs. The filling and updating of the database is part of the *National Implementation Plan for the Stockholm Convention on POPs*. The System of Records of Contaminated Sites is also used to assess categories of priorities for eliminating old environmental hotspots.

SIRIUS - the system for the integration and management of information in the field of the technical protection of the environment was intended to take the place of several information systems and databases that function as tools for processing data concerning the technical protection of the environment. The aim was to build up a single, comprehensive information system hooked up to the basic registers of public administration, to connect this IS with other relevant sources, to create an interface for managing sharing and communication and to create a set of analytical tools for data evaluation. It was meant to be used by all the concerned entities: public administration, local government, businesses, citizens and others.