



saipem



Sustainability Report 2010

## Ersai Mission

The Mission of Ersai Llc is to remunerate capital investments and to be beneficial to local content through growing in competence and efficiency.

Our goal is to maintain Leadership in provision of services for the on/offshore industry and infrastructures in the Caspian Area.

We pursue the satisfaction of our clients by developing effective, innovative and top quality solutions, with full respect of Safety, Quality, Health, Sustainability and Environment requirements of Republic of Kazakhstan and International Standards.

Particular care is devoted to create conditions which allow local employees as well as local industrial enterprises to grow within the Republic of Kazakhstan.

## introduction

Management introduction	2
Ersai at a glance	3
Ersai overview	4
Ersai main projects in 2010	5
Ersai in perspective	5

## ersai sustainability talent

<b>Sustainable business strategy</b>	<b>10</b>
The economic value of Saipem Local Content Strategy	12
<b>Ersai and its customers</b>	<b>14</b>
<b>Strategy towards vendors</b>	<b>15</b>
<b>People of Ersai</b>	<b>16</b>
People management	16
Training	17
Welfare	20
Our safety priority	20
Commitment to health promotion	22
<b>Environmental preservation</b>	<b>24</b>
Oil Spills Prevention and Mitigation Measures	24
Improvement in waste management	25
Water Management	26
Ersai Green Corner	26
Environmental Training	26
Environmental Monitoring	26
<b>Company citizenship</b>	<b>26</b>
Relation with local authorities	26
Socio-economic development	27
Health promotion	28
Education	29
Environmental protection	29
Culture	29

## appendix

Methodology	30
Glossary & Acronyms	30

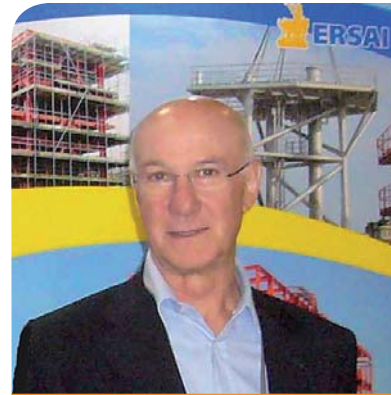
## management introduction

Ersai Caspian Contractor Llc experienced another fulfilling year in 2010, with continuing rapid changes in our business. We consolidated our position as the leader in provision of services for the offshore industry and infrastructures in the Caspian Area.

One of my commitments was the idea that Ersai could produce an annual sustainability report for our stakeholders in which a full and honest review of our performance is provided. It therefore gives me great pleasure to introduce you the first Ersai Sustainability Report, which built up on the work that the company did in 2010.

**Camillo Ceresa**

*Ersai Caspian Contractor Llc General Director*



*Camillo Ceresa, General Director*

### achievements in 2010

- April:** Ersai received RMRS Recognition Certificate of Testing Laboratory.
- May:** Construction of the 110 kV Double-circuit Overhead Transmission Line will decrease consumption of fuel and emissions to the air in the future.
- July:** Ersai successfully completed the Castoro 16 Project. In a span of six-month project duration the QMS for the project was developed, implemented, recorded and delivered final documentation approved by classification authority along with the product on schedule.
- October:** Phased Array Equipment Purchasing and NDT personnel certification and training was the main improvement in the NDT section.
- December:** IVMS installation in all cars working for Ersai during the year has improved safe driving within the Company.



Sail away of Pipe Rack 5.1

key figures

Number of employees

2,596

Percentage of local employees

74%

Purchasing related to local suppliers and subcontractors

59%

Million USD value generated in the Kazakh society as indirect and induced effects of Ersai operations

115

People: local employment generated as indirect and induced effects of Ersai operations

5,968

Percentage of treated sewage water re-used for technical purpose

52%

Percentage of waste segregation

83%

about ersai

Ersai is a leading company in Kazakhstan, providing a large range of services to the Customers including Project Management, Organisation, Engineering, Procurement, Construction & Installation, Commissioning & Maintenance of Plant and Equipment, Facilities, Shipbuilding, Port Management, Logistic Services and Ancillary Works pertinent to the Oil and Gas Onshore and Offshore locations.

The high technological level of structures and equipment owned, associated with grooved experience of qualified personnel, allows Ersai to reach a yearly production of 35,000-40,000 tonnes for fabrication of structural, tubular, piping, pile assembly, etc.

Ersai is based in Aktau, head office in Almaty and with a Fabrication Yard in Kuryk, fully equipped with all types of cutting, bevelling, welding and painting equipment and crange up to 1,000 tonnes lifting capacity.

Ersai has had an Integrated QHSE Management System certified in accordance with ISO 9001:2000 since 2005; with the new revision of the standard, QHSE Integrated Management System has been re-certified in compliance with the new ISO 9001:2008 and certified in compliance with ISO 14001:2004 and OHSAS 18001:2007 standards in 2008.

In 2010 the Quality Management System of Welding Process was re-certified in compliance with ISO 3834-2:2005 standard.

Ersai Yard has received Recognition Certification from Russian Maritime Register of Shipping (RMRS) as Ship yard. RMRS acknowledge the Welders Training and Qualification of Ersai Yard Training Centre to work on Shipbuilding and Reconstruction activities.

Ersai has fully implemented the Code of Ethics, which defines clearly the values the company recognises, accepts and shares, as well as the responsibilities it assumes in relation to internal and external stakeholders.

Compliance with the Code of Ethics is of fundamental importance for ensuring the functioning, reliability and reputation of the Company. The Code requires fairness, loyalty, integrity and transparency of operations, conduct, working practices and processes and in relations within the Group and with external parties (Shareholders, Clients, Suppliers, Partners, and Local Communities).



# ersai overview

## main stages of the history of ersai

### September 2003

Ersai LLC was founded as a Kazakh Company by merging Saipem Group worldwide experience in offshore and onshore construction and installation and capabilities of Kazakhstan business group ERC Holding.

### April 2005

First project awarded for the Trunk Line and Production Flowline project as a subcontractor of Saipem for Agip KCO. Ersai has moved about 180,000 tonnes of steel pipes and 175,000 tonnes of cement, sand and iron ore used for pipes coating process.

### August 2005

Second project awarded for the Piles and Flares project. The scope of work was inclusive of the following activities: fabrication assembly and load out of more than 50 foundation piles, 2 flares jackets, 2 cruciform supports and LSA pedestal crane; 18 strand jacks; logistic services for offshore activities. The total weight of steel structure moved is more than 21,000 tonnes.

### December 2005

Completion of the Fabrication and Logistic Yard in the village of Kuryk, Mangistauskaya Oblast, Karakia District.

### 2006

Starting of the execution of the Pipe Racks project. The scope of work is inclusive of procurement, prefabrication, assembly, erection and load-out of about 15,000 tonnes of ancillary steelworks and piping. The total weight of structural and piping steel moved by Ersai was about 19,000 tonnes.

### 2007

Under other huge project Hook Up and Commissioning of Complex 'D' and 'A' Offshore Facilities mainly implementing on Kashagan oilfield Ersai also prefabricated about 1,000 tonnes of steel structure. In 2007 Ersai started the second phase of Yard development which was inclusive of: extension of the quay side by adding additional 200 m of jetty plus construction of 100 m mooring dolphin and 200 m service jetty; construction of more than 1,700 m of breakwaters protecting Kuryk Port water front basin; erection of additional accommodation facilities; erection of 3 new structural and piping prefabrication workshops with total weight of 140,000 tonnes. For the construction of breakwaters were purchased and transported to Kuryk Yard about 310,000x160 tonnes x km of high density rock, 90,000x80 tonnes x km of low density rock and approx 94,000 cubic metres of granular material, crushed stone and ready mix concrete.

### December 2008

Completion of the Kuryk Yard development with extension of the quay side, mooring dolphin, breakwaters, new accommodation facilities and 3 new structural and piping prefabrication workshops.

## ersai main projects in 2010

Name	Client	Description
Pipe Racks project	Keppel Kazakhstan Llp	Procurement & Fabrication (assembling and welding of Pipe Racks; Non Destructive Test-NDT and Joint Coating of all welds; Painting and fireproofing) of Ancillary Steelwork & Pipe racks.
Pipe Racks project	Agip KCO	Procurement and Fabrication of Ancillary Steelwork & Pipe racks; testing of piping, supply and installation of E/I and telecom material; overall project management.
Piles & Flares project	Saipem Kazakhstan	Assembling and Welding of cans for the various lengths of piles to be transported. Assembling and welding of flares. NDT and Joint coating of all welds. Skidding of Pipe Racks and Manifolds.
Hook-up and commissioning	Agip KCO	Hook-up & commissioning of Complex D and Complex A offshore facilities. In Kuryk yard the following activities are being carried out: onshore works for the reinstatement of Loose Items, prefabrication, marine logistics.
D-Island Rig Conversion Relocation of the D Island Rig 401 and Rig 402 and EPFC1	ExxonMobil	Activities execution in D&R phase consists of the following steps: decommissioning and material & equipment inspection; cutting; fitting; welding; non-destructive testing; final dimensional control; painting; final release inspection. Activities execution in EPFC1 phase foresees Engineering, Procurement, Fabrication and Construction.
Conversion of Castoro 16 Barge	Saipem Kazakhstan	Project Management, Construction Engineering, and Procurement, Dismantling of equipment from old TRB barge, preservation and installation on new C16 barge. Construction and installation of steel outfitting, Testing and Commissioning.
TRB	Saipem Kazakhstan	Convert the existing 'Module 19' into a Temporary Refuge Barge (TRB) to be used for Kashagan Hook up and Commissioning Project. Ersai activities foresee detailed engineering design, procurement and construction.

## ersai in perspective

Ersai aims to maintain the leadership in provision of services for the onshore and offshore industry and infrastructures in the Caspian Area, by applying HSE and Quality best practices thus respecting timing and cost for project execution, and be locomotive of the development of local content and local industrial enterprises of the area.

Ersai Llc is strongly committed to achieving the following defined main objectives, divided in two categories and based on the two main principles:

1) To develop a network where everybody's commitment contributes to the common well being:

- to maximise Local Content;
- to maximise Import Substitution;
- to improve Social Infrastructures & Services;
- to maintain Effective Working Relationships with Local Authorities;
- to develop mentality, measures, and tools to protect the Environment and the health of Employees.

2) To plan activities considering at the same level all 7 aspects: Cost, Environment, Health, Moral, Production, Quality, and Safety:

- safeguarding the personnel's health by prevention campaigns;
- monitoring, reporting, and correcting all unsafe conditions to eliminate any major criticality for safety situations;
- keeping high level of attention to pollution aspects to safeguard the environment;
- promoting moral and ethical behaviour of all employees as a style of the Company;
- monitoring social, economic and environmental performance with the aim of measuring Ersai's impact so as to ensure compliance with legal requirements and best practice guidelines;
- increasing quality of services provided by Preventive Monitoring Activities System, recording all unwilling situations;
- defining an adequate description and schedule of job to be done by avoiding unplanned and stressing activities;
- respecting the Work Program & reducing to a minimum the mechanical break down time & standby time that may occur during operations.



### Kuryk Logistic Base and Fabrication Yard

Base total area: 220 hectares

Developed area: 130 hectares

Shelter area (structural and piping prefabrication, painting and sand blasting, warehousing): 25,000 m<sup>2</sup>

Offices area: 3,360 m<sup>2</sup>

Accommodation facilities for 2,300 persons in 28 buildings

Fully equipped Port with following configurations:

- Water front 1,000 m;
- Quay: 464 m; 22.4 m width;
- Mooring dolphin: 100 m length; 22 m width;
- Service Jetty: 200 m length; 20 m width, with 30 tonnes gantry crane;
- Water front basin: 328,740 m<sup>2</sup>;
- Water front fully protected by breakwaters for a total of about 1,700 m;
- Entrance channel: 120 m width;
- Water depth: 5.2 m C.D.

Total fabrication capacity of about 1,400 tonnes/month.

In case the future workload could request additional fabrication capacity, it can be increased up to 3,200 tonnes/month by further developing of already owned area and employment of additional personnel.





## the fleet

### Ersai 1

Length of hull 139.84 m; length overall (loa) 140.45 m; breadth of hull 42.00 m; breadth overall 42.61 m; depth 8.40 m; lightship approx. 9,200 tonnes; lightship (without crane) 7,300 tonnes; draught light approx. 1.70 m, typical 4.00 m, max. 5.60 m.  
Class notation RMRS KE I technological pontoon.  
Main crawler crane capacity 1,200 tonnes.



### Ersai 2

Crane type: Demag TC-1000s; maximum load: 200 tonnes fully revolving; auxiliary hoist: 10 tonnes; boom length: 54 m.  
Powered: diesel-hydraulic; length (loa): 59.89 m; tonnage: gross 824 tonnes, net 247 tonnes.  
2x1,000 kg, chain 150 m.



### Ersai 400

Accommodation Barge ABS (American Bureau of Shipping)  
Hull type: ship shaped barge with side blisters - ice class notation A0  
Hull length: 111 m; hull width: 16.20 m; depth: 3.75 m; load line displacement: 3,600 tonnes; freeboard draught: 2.8 m; 2x10 tonnes capacity revolving cranes at side; 1x3 tonnes revolving crane at stern. Helideck: aluminium made and suitable for AS 332L2 'Super Puma' helicopter.



### Ersai 3

Classification: Utility barge; Class: Germanischer Lloyd: 100 A5 K E 'Special purpose ship' RMRS.  
Length overall: 68.27 m; gross tonnage: 1,963 tonnes; 1 pedestal crane capacity 5 tonnes at 12 m on exposed deck at stern; 1 overhead crane of 3 tonnes capacity; 1 electrical monorail hoist of 2 tonnes capacity.



### Ersai 4

Type of unit: WSB1 - Workshop storage barge; class: RMRS; dimension: 96 m x 15 m x 3.6 m draft; pedestal crane capacity 5 tonnes at 12 m; overhead crane capacity 3 tonnes; electrical hoist capacity 3 tonnes; office (100 pp.), meeting room. Ice reinforcement (0.6 m).  
Facilities for external users: 3x275 kW DDGG set 50 Hz, 1 air compressor (10.5 m<sup>3</sup>/min - 12 bar); dirty water tanks: 320 m<sup>3</sup>.



***Ersai recognises  
its role in the  
Kazakh society  
and actively works  
to maintain an open  
dialogue with all  
its stakeholders,  
with the aim  
of aligning  
its business  
and activities  
with their needs  
and expectations***



**ersai sustainability**



**talent**



# sustainable business strategy

## ersai management's point of view on sustainability in today's business



**Camillo Ceresa,**  
General Director

One of the major targets for Ersai is to be really integrated with the social network of the Territory where the activities are performed. This means to be enthusiastically devoted in creating conditions for the development of the style of life of the citizens as well as for the growing of new entrepreneurial initiatives.

These values, together with the full consideration of the Health of our employees and our neighbours and the full respect of every environmental issue, represent for each member of Ersai staff the utmost commitment and goal to reach.



**Yan Chan,**  
Deputy General Director

I am very pleased that as a Company we strive each year to enhance our Sustainability involvement. It should be gratifying for all our colleagues to know that we positively impact the people's life around us. I am encouraged by the fact that our social initiatives are getting attention and support by our Clients and Subcontractors. As a team we can do a lot more!



**Sergio Scardino,**  
Operations Manager

The sustainable development is a pattern of resources use that aims to meet human needs while preserving the development of all aspects of human life resolving the conflict between the various competing goals and involves the simultaneous pursuit of economic prosperity, environmental quality and social equity.

In 1987, the United Nations defined sustainable aspects as 'development which meet the needs of the present without compromising the ability of future generation to meet their own needs'.

I believe that Ersai, today, in developing own business, is a model of guide for this change in the territory. The results of all the efforts devoting on sustainability are the indicators of the continuous motivation to support the initiative to sustain all the aspects related to an increase of safety, health and quality of life, to an increase of economic objectives and an environmental defence, both for people and country.



**Lorenzo Starnieri,**  
Procurement Manager

Deriving from the Latin 'sustinere' the sustainability in my understanding is a commitment in the first place. Commitment to support, grow, develop and maintain.

In terms of procurement this commitment is expressed in two main strategies:

- a) procure Goods and Services considering the best value for money, the environmental, quality and social aspects of the products/ service offered by national vendors, understanding that this bring to social challenge in the Region that entails development and improvement in urban planning and transport, local and individual lifestyles, consumerism, development of infrastructure, reinforcement of competition between the local vendors, local vendors continuous development and their participation in social-economical life of the country;
- b) establish, develop and make the national recourses grow within the Department to have the professionals, Managers truly devoted to our Company principles, guidelines and policies.



**Yousri Khattab,**  
HR, ORGA and ICT Manager

Ersai inculcates to its members the true value of camaraderie towards work with a common will to bring out the best professional environment and demonstrate to stay in a competitive world.

Continuous nurturing of young minds, personality and career development and collaboration with the local content of its state territory is essential to achieve the beneficial result of our company business. All of these practices escalate everyone's awareness to prolong the life of our business for the future and its generation without necessarily compromising what has already been established.



**Rocco Nucera,**  
Finance and Control Manager

I am proud to work within a company that cares not only about short-term needs but also about generations to come, preserving the environment and local people future.



**Fadi Jabbour,**  
QHSE & Sustainability Manager

The promotion of Local Content and the proactive and open approach in the relation with the communities have proven to be a successful factor for both our present and future in Kazakhstan.

This could be done in terms of employment, know-how and professional qualifications transfer to our local suppliers and subcontractors.



**Massimo Cadau,**  
Project Manager

Sustainability has different levels of management, different levels of development and importance of the projects involved. From the smaller to the bigger one, it is a pleasure to see the involvement of our people and the very positive response from the community. Spreading the message and encouraging all initiatives shall be our target.



**Giuseppe Tilloca,**  
Project Manager

The heart of our company is the people working with us around the world, we are developing our business thanks to them, and their wellbeing has to be our mission. In this international environment the local content is a key part of what we have to be focused on.



**Andrey Pak,**  
Project Manager

It is very evident nowadays that social stability and wellbeing of local community where company operates plays a significant role for business success and growth. Ersai Sustainability Program has been proved as a workable tool to integrate and develop social aspects into business processes, and company economic results hardly could be reached without this.

## the economic value of saipem local content strategy

To provide support and evidence of the value generated through its commitment to sustainability in terms of wealth, skills and entrepreneurial capacity created, Saipem decided to measure the economic and social impacts of its Local Content strategy. In fact, measuring the tangible benefits of this strategy is the key to demonstrating a sustainable business approach and improving stakeholder relationships at local level.

In order to quantify the benefits, a methodology has been implemented to evaluate the economic externalities. ‘Externalities – as defined by J. Stiglitz (Nobel Prize for Economy) – are actions of an individual or a firm that have effect on another individual or firm for which the latter does not pay (in case of positive impact) or is not paid (in case of negative impact)’.

The methodology has been applied to Ersai Caspian Contractor Llc operations and activities. The study has been conducted for the year 2009 and updated in 2010.

The study aimed to provide a comprehensive assessment of the Ersai impacts on the economic and social development of Kazakhstan, with particular focus on the Mangystau Oblast and the Karakiyanskiy District.

### methodology

Quantitative and qualitative stakeholder surveys were conducted. The results of the quantitative survey and data from Ersai accounting system (e.g. finance, procurement, QHSE, human resources, training, etc.) were used to calculate the multiplier for each of the identified impact. The multiplier is usually a number used to assess the interdependence of economic sectors. It gives the magnitude of the impacts on the economy derived from changes in a given economic activity. It can measure the direct, indirect and induced effects resulting from a change (increase or decrease) in economic output.

Three socio-economic categories of impacts related to the Local Content strategy were identified and quantified, namely:

- **Economic Output:** financial impact of payments made by Ersai to finance its locally sourced operating expense and to pay taxes. It is measured as the sum of direct, indirect and induced impacts<sup>1</sup>.
- **Employment:** Ersai makes an important contribution to the increase of local employment through creation of direct, indirect and induced jobs.
- **Human capital development:** Ersai contributes to the increase of the usable knowledge and skills of its employees in terms of additional lifetime earnings expectancy and increased employability.

### quantitative results

The figures below represent the consolidated quantitative impacts of Ersai for 2010.

### consolidated quantitative impacts of ersai for 2010

	Direct impacts	Indirect and induced impacts	Total impacts
Economic value (million USD)	350	115	465
Employment (No. jobs)	1,923	5,967	7,891
Human Capital Development (million USD)	1.7	11.4 <sup>(*)</sup>	13.1 <sup>(*)</sup>

(\*) As expected value in 5 years.

[1] The ‘direct impact’ is the actual level of expenditure generated by Ersai. The ‘indirect effect’ is the economic activity triggered in other sectors by the purchases made by Ersai. The ‘induced effect’ results from new household spending that is a consequence of both the direct expenditure and the resulting indirect expenditure.



## economic output

The results show that Ersai contribution to the Kazakh economy is about 1.33-1.35 times the direct expenditure in terms of local purchasing, salaries and taxes for a total impact within the RoK economy equivalent to 465 million USD. The largest recipients of this contribution are local businesses (70%) and National Government (21%).

Saipem's contribution to GDP amounts at 422 million USD (including direct, indirect and induced contributions), which when juxtaposed with the 2010 GDP, represents approximately the 0.34% of the GDP of RoK.

## employment result

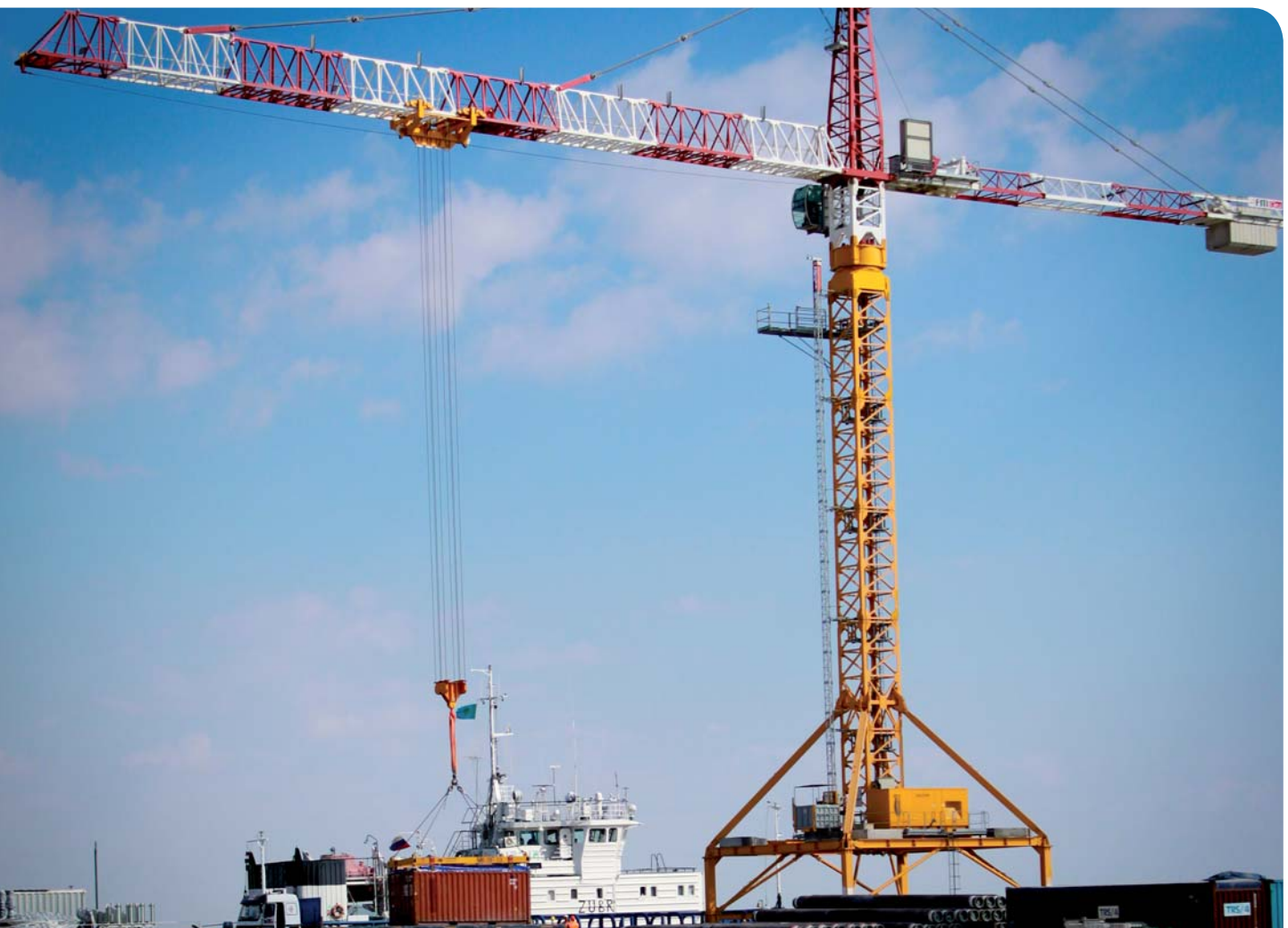
The results show that Ersai's contribution to Kazakhstan in term of total employment is about 1.40-4.32 times the local direct employment. In total, as a result of Ersai activities, approximately 7,891 jobs are created, 77% of which are created directly in the Mangystau Oblast.

Along the supply chain, sectors such as sub-contracting (36%) and catering and accommodation (32%) are the principal beneficiaries of the job creation.

## human capital development result

The results of the evaluation show that Ersai contribution to human capital development is about 1.68 times the Company's direct expenditure in training. Hence, as a result of the Ersai training activities, the expected economic value generated over a five-year time frame in terms of local employees salary gain is about 13 million USD.

Access to vocational and professional training provided by Ersai contributes to the development of the Kazakh economy and society; on a yearly basis the total 1.7 million USD expenditures for training spent by Ersai have generated an additional value of 1.16 million USD, meaning that every 1 USD of vocational and professional training expenditure creates an additional value of 0.68 USD in the society.



Gani Crane at Kuryk yard, Work in progress

## ersai and its customers

### project management review meeting

In 2010, Ersai project teams started to implement the Project Management Review Meeting for all projects carried out in Kuryk Yard, in order to analyse the results with the functions concerned and to identify possible actions that will add value to further project processes.

### lessons learned

Lessons learned are of paramount importance considering the opportunity to learn from failures and success and adding value to the future activities and processes. In this context, on July 15, 2010 a 'Lessons Learned Workshop' took place in the frame of the 'D-Island Rigs Conversion project', Decommissioning and Relocation phase. ExxonMobil and Saipem project site representatives as well as Ersai project management and key functions participated in the event, sharing their opinions and experiences. All stages of the project from the design development aspects to concerns related to final documents preparation were discussed. ExxonMobil and Saipem agreed on the way Ersai analysed the problems and proposed relevant corrective actions. Ersai shared positive lessons from the day-by-day cooperation with all parties. For example, it was mentioned that thanks to combine efforts of ExxonMobil, Saipem and Ersai quality team, the frequency and efficiency of the Quality walkarounds on project site and the quality of tool box talks had been considerably increased.

### failure analysis

A dedicated meeting was conducted involving project team of D-Island Rigs Conversion Project in order to develop an analysis on major management and/or technical issues/breakdown occurred in all projects, including details of the failures, remedial actions implemented to solve the problem, analysis of the causes, corrective actions implemented to avoid reoccurrence of the problem and suggestions/lessons learnt for future similar projects.

### customer satisfaction monitoring

In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and a key element of the business strategy. For this purpose, Customer Satisfaction Questionnaires are sent to customers in order to receive feedback about the activities carried out by Ersai. In 2010, 2 feedbacks were received: one for the Pipe Racks project and one for the Piles and Flares project. The relevant corrective actions have been implemented. All Customers' feedbacks have been duly solved. The strength points highlighted by the Customer concern mainly

the good execution of the management of engineering change on the shop floor, while the weakness points include both administrative aspects (delays in provision of documents) and some operational activities (e.g. inefficient allocation of work for either the painting and electrical disciplines).

Upon final coordination meeting at the frame of D-Island Rigs Conversion Project that was held with the involvement of Ersai, Saipem and ExxonMobil, the Project Manager of ExxonMobil remarked:

1. excellent safety and quality service to project;
2. good cooperation between project teams;
3. good stress resistance of project quality team and professional response to revised project scope.

### certified laboratory

To provide a more comprehensive and high quality service to its Customers, Ersai has established a Testing Laboratory. In April 2010 the Testing Laboratory received RMRS Recognition Certificate. Scope of accreditation: Metal, welding joints of metallic Ships hull, Floating structures, Mobile offshore drilling units (MODU), Fixed offshore platforms (FOP), Submersibles, Ship's diving Systems, Boilers, Heat exchangers, Pressure bottles, Ship's lifting appliances and handling gear, Pipelines. Steel Castings, Rolled products, Forgings, Stampings, Details of mechanisms, devices and systems.

The Audit from the Kazakhstan National Centre of Accreditation was completed on Ersai NDT Laboratory. The Audit results were very positive and no Non-Conformities were found. Ersai



Alexander Kolesov, rainbow view from pile

passed this milestone successfully and received from the Kazakhstan National Centre of Accreditation the Accreditation Certificate along with the Accreditation Scope (VT (Direct and Remote), UT, TOFD and Phased Array Testing, MPT, LPT, HT, PMI with the testing scope on Pressure piping, tanks, Offshore structural Platforms, Modules, Rigs and lifting equipment).

As the result of Third Party Audit by BV Certification on Compliance of Ersai Integrated Management System with ISO 3834 standard requirements, during the close-out meeting, the Audit Team expressed their positive impression about the very good understanding of the standard requirements, high quality professionalism of all personnel being involved during the auditing activities and well organised structure of Ersai processes for Welding Activities. Ersai Welding Activities Management System has been successfully assessed, confirmed and recommended to be certified being in compliance to ISO 3834-2. The number of the companies in Saipem Group that already reached this ISO 3834 certification is now 2, including Ersai.

### sustainability awareness campaign

In 2010, Ersai started its awareness campaign on Sustainability issues among main Clients. Project Manager of AGIP KCO gave a high praise of what Ersai is doing to the community. As the result of the campaign, AGIP KCO employees started to take active participation in the social life of Kuryk village. At the moment, Client employees have taken under their patronage the Kuryk kindergarten assisting them with the necessary facilities.

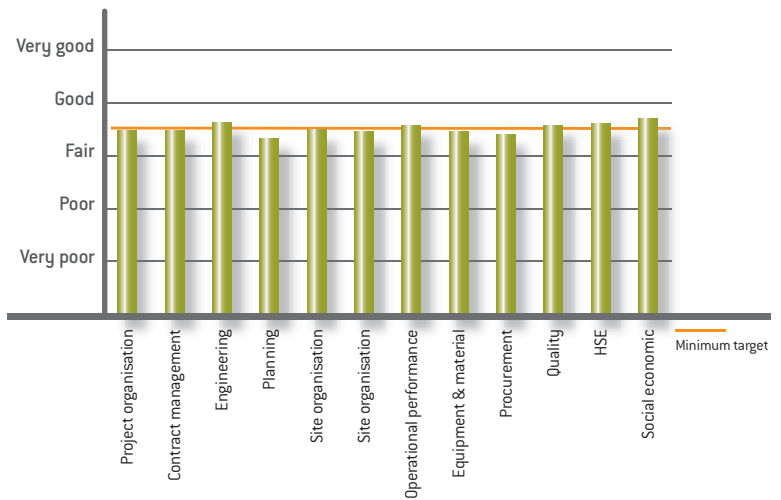
## strategy towards vendors

Suppliers and Subcontractors are key to Ersai success. Ersai is committed to maintaining and improving a mutual long-term understanding and trust with the enterprises that work with and for Ersai.

### improvement of the vendors' performance

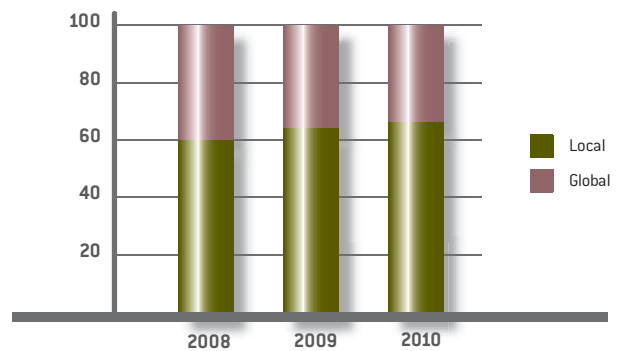
Ersai realises that local suppliers and subcontractors need assistance and support to develop their capabilities in order to meet international standards. Ersai initiated

#### customer satisfaction

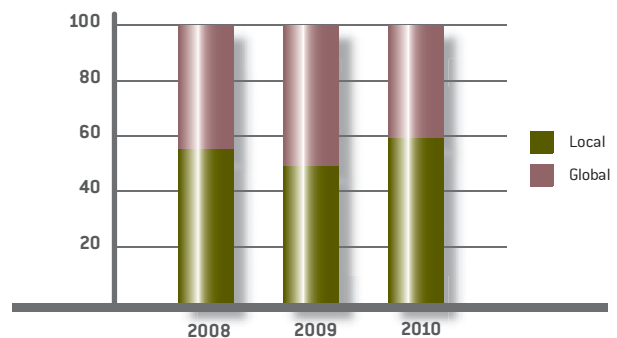


Note. Following the results, the Project Team has already taken corrective actions on the areas identified below the minimum target.

#### qualified suppliers & subcontractors (%)



#### total purchased by local and global vendors (%)



the development and implementation of comprehensive subcontractors' safety programs, with the aim to help them to improve their systems and achieve improved overall HSE performance.

Audits are conducted by Ersai on suppliers and subcontractors with the purpose to assess the Vendors' QHSE Management System against ISO 9001, OHSAS 18001 and ISO 14001 standards and give feedback on improvement actions to be taken and to pre-qualify them in the Vendor Data Base. In 2010, Surveillance Audits were conducted on 9 main subcontractors and suppliers. The areas of improvement identified were mainly related to HSE matters and control of records. To improve the performance of the Vendors QHSE Manager launched monthly meeting with the subcontractors working on site with the purpose of discussing the QHSE issues on a regular basis and deciding the necessary measures to be taken by them. Also HSE trainings are organised to the Subcontractor personnel working on the premises of Ersai. A special training addressed to catering subcontractors on Food Safety Management System HACCP 22000 has been organised.

### sustainable partnership

On October 18, 2010, Ersai conducted a first meeting with main local subcontractors on Sustainability issues.

The purpose of the meeting was:

- to achieve sustainability results through potential partnership with subcontractors;
- to introduce the main principles of Ersai Sustainability Policy;
- to involve the subcontractors in the social life of the community where they are working;
- to present the result of externalities study, and Ersai subcontractors' impact on the economy of their region;
- to make aware the subcontractors on Ersai initiatives; the sustainability plan and to introduce the projects that they can participate in.

As the result of this campaign, a number of vendors like CIS and RBG started to be more proactive in the sustainable development of the region by directly investing in social initiatives.

RBG supported the Junior Basketball League, thus being the major partner of Ersai. CIS participated in the cultural development of the Kuryk region by investing in the enhancement of music facilities of Kuryk Palace of Culture. In order to continue sustainability campaign among vendors, Ersai launched sustainability assessment questionnaire among its major vendors with the purpose of making a survey on the sustainability initiatives carried out by Ersai Vendors.

## people of ersai

Employees represent the main key resource for business implementation and tone of the main pillars of sustainability in Ersai. The importance of human resources' role in Ersai is the base of company management policy. Involving highly qualified and motivated employees, creating good environment for their effective work and continuous professional development are the basic purpose of Ersai. With full regard and respect to its employees, Ersai carries out fair and open policy at all working stages. General obligations of the employees and Ersai are stipulated in Collective Agreement and Labour Contract.

### overview on people management

Ersai employed 2,596 people in 2010, 74% of them are local (December 2010).

Ersai commitment to local employment was driven by different targets. Ersai is approaching a strict policy to involve as much local employees as possible. The Local content strategy satisfies external stakeholders such as local authorities and clients who have direct interest in it. There are two aspects that mainly characterise the Companies' relationship with its employees: a high investment in training and important interest in HSE matters.

### people management

Under the Retention Plan, which is one of the programs to motivate key resources and retain them in the Company, 9 key resources signed an agreement in 2010. The implementation of



Working in the Kuryk Yard

a 'loyalty' attitude within the Company resources, a career prospective and job continuity are the main advantages of the program. A personal saving account was created for each employee in the Kazinvestbank, where every year Ersai allocates a deposit, depending on seniority achieved, based on the monthly basic gross salary. This project has been scheduled for a 5-year period for each key resource. 29 employees collected their accumulated capital, which is 30% of credit fund after 3 years. Moreover, Ersai established Valuable International Pool (VIP), which represents a segmentation process aiming at the creation of an internal market for international resources. The purpose of Valuable International Pool is to simplify data collection, at Corporate level, focusing on some critical clusters and sharing more information about them. The objective is to identify the resources considered significant for Ersai and the entire Saipem Group who are characterised by:

- high potential to cover managerial responsibilities at worldwide level;
- proven technical-professional background and capability to transfer the know-how worldwide;
- being potential leaders for the future.

Up to now, 14 Ersai VIP resources have been identified. The second approach is the 'Assessment of Potential' with the aim to gather information, which may be useful in appraising the potential skills of young resources. Seventeen employees passed the assessment, the information collected allowed the Head of Departments and Supervisors to accurately plan the steps of their professional development, and analyse their strengths and areas of improvement.

## training

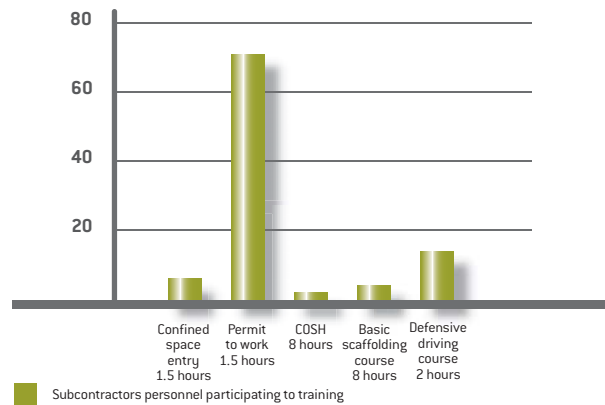
The Company needs to have specific, highly qualified, continuously updated professional personnel at its disposal. In support of this need, the Company provides both theoretical and practical training courses, for the development of the professional skills by its Human Resources Department. The Company organises all types of trainings on the basis of training plan and budget approved by the top management of the Company.

## training centre

Recognising the need for professional qualified personnel as welders, pipe-fitters, steel carpenters, scaffolders, instrumentation specialists, painters, hydro test specialists and electricians, Ersai decided to further

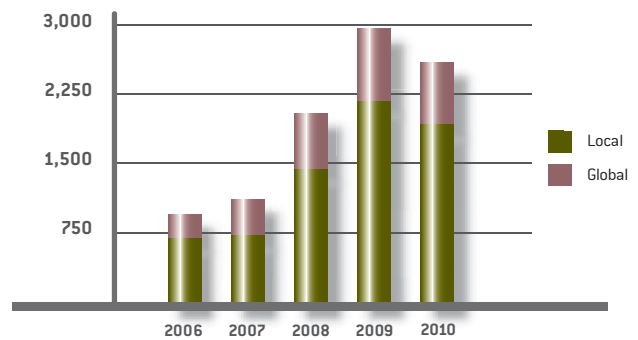
hse training for subcontractors

(No.)



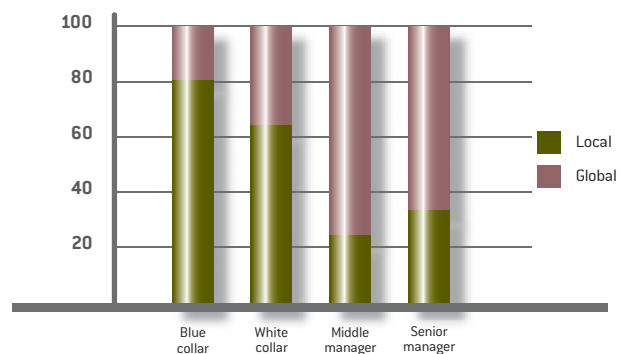
increase of ersai local staff over total workforce

(No.)

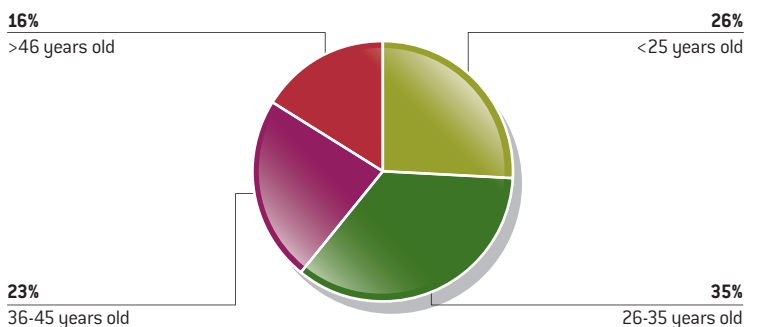


employees category distribution

(%)



employees distribution by age





develop its Training Centre opened in April 2005. In 2009, Ersai Training Centre became a separate entity with the new name Professional Training Centre LLP, strictly focused on serving the industry's training needs. The Professional Training Centre trains people from the local community on the skills required to meet the requirements of the company and to provide additional training to further enhance the individual skills if and when required. In addition to the main technical courses, since 2007 the PTC Professional Training Centre has organised language and computer skills courses for unemployed inhabitants and school children of Kuryk settlement. In August 2010, PTC QHSE Integrated Management System was successfully certified in compliance with three standards: ISO 9001:2008; ISO 14001:2004 and OHSAS 18001:2007 by 'Bureau Veritas' Certification Body.

## training courses

The following trainings were organised throughout 2010:

- IWI courses for local engineers at Ersai Training Centre. These training courses are directed towards their qualification in accordance with IAB-041-3-08 'IWIP-International Welding Inspection Personnel' - Revision 3 (IWI Basic Level);
- training course to develop NDT technicians with the use of the accredited NDT Laboratory and in accordance with 'Non-Destructive Testing Specialists Certification rules' and in compliance with GOST 30489-97, EN 473, ISO 9712 requirements;
- specific training programs such as specific 'PMI Course' for local specialists working at NDT Laboratory of Ersai (e.g.: on safe and productive usage of Thermo Niton XL3t Portable XRF Metals Analyser Instruments);
- based on the application of Phased Array and TOFD, a dedicated training was organised for advanced NDT techniques in Ultrasonic testing (which have significant advantage over conventional radiographic testing using harmful radiations) by Professional Trainers from 'CCS Services SA'. As result, five Ersai personnel were certified in PA and TOFD to Level 2 as per ISO 9712/EN 473 standards;
- training course on ISO 14371 for guidance to fabricators on the specification and allocation of tasks and responsibilities to all their welding personnel;
- ACLS course on food safety addressed to medical personnel with the purpose of improving occupational health knowledge;
- (ACCA) Diploma of Financial International Report, Financial Accounting, Management Accounting, Tax & Law training was carried out for local accounting specialists;
- negotiation with Commercial Partners, Contract Administration & Negotiations Characteristics trainings were addressed to young commercial and legal department specialists;



Ersai Caspian Contractor Llc Training Centre

- BOSIET, Scaffolding Safety, Training & Examination of knowledge on RoK Safety & Labour Protection Legislation trainings were carried out for local employees also involving Ersai Subcontractors' employees;
- in the Environmental section, courses on Ecology Aspect for Petroleum Branch, Greenhouse Gas Emission, International Certificate in Environmental Management & Assessment, Environmental Management System 14001:2004 Lead Auditor were carried out by external third parties;
- ISO 9001:2008 Awareness Training was organised with the purpose of improving the quality knowledge of personnel.

## training of local young engineers

Thanks to the commitment of Ersai Top Management to the development of local resources, and further meeting between



IWI course for local engineers



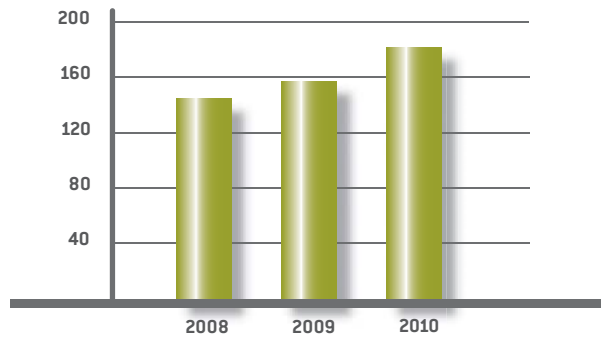
Ersai Deputy General Director and the chief of the offshore department of Saipem Energy Services (SES) in Fano (Italy), the idea of training some Ersai technical resources, with some years of seniority in the area of construction, on the main specific topics of the offshore pipeline design has been made concrete. To this purpose, a group of five young Kazakh engineers started to study for a period of nine months at the engineering centre at SES Fano and then a further period at the Integrated Projects in Saipem Milan (Italy). Then they will be also involved in offshore campaigns on board of the lay vessel Castoro 12, operating in the Caspian Sea, after having received the mandatory formation from the attendance of the safety course BOSIET (Basic Offshore Safety Induction and Emergency Training) in conformity with OPITO directives and guidelines at the institution Apt at Bornasco (Italy).

The whole training program proposed by SES on the basis of previous educational experiences has been agreed upon with the Ersai Engineering Manager and under the supervision of Dr. G. Franco, responsible of the Saipem Corporate unit Multi Business Engineering (ENGM). The resources are distributed in various disciplines existing in the structure of Fano and pertaining to the pipeline design, such as process and pre-commissioning, materials (pipes, coatings, corrosion and cathodic protection), mechanical sizing, advanced technologies and analyses, geotechnics applied to the pipeline-soil interaction.

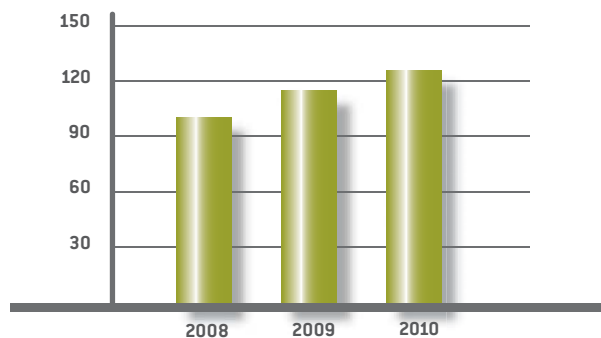
The resources are trained in the specific technical issues through a technical academic course made of 25 thematic workshops spread over the entire period of their stay, and especially with the 'training on the job' system making them equal to any other junior resource of the office, with the responsibilities and expectations normally attributed to staff personnel approaching a new discipline. Each resource has his/her own tutor who will give support during the technical training and the individual level of training achieved will be regularly monitored through the completion of an evaluation form.

At the same time, the trainees participated in the 10<sup>th</sup> edition of the Offshore Mediterranean Conference in Ravenna in March 2011. Moreover, an introduction to the opportunity & risk analysis, assessment, management, and knowledge sharing in a bid or at project execution phase was conducted by the ROKM (Risk and Opportunity and Knowledge Management) function.

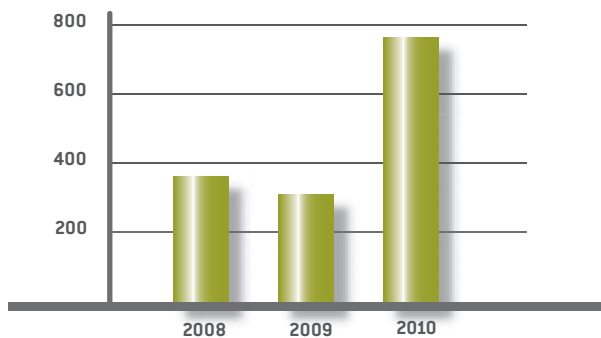
average monthly wage paid to local white collar (thousand KZT)



average monthly wage paid to local blue collar (thousand KZT)

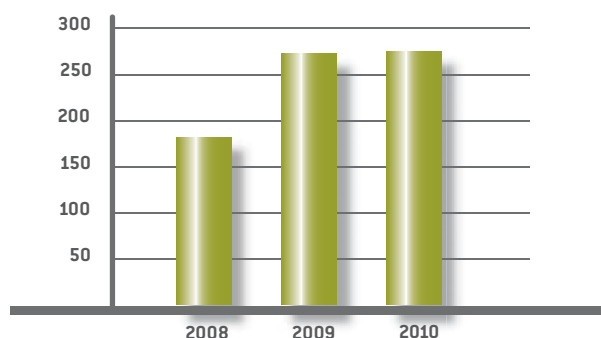


turnover (No.)



High turnover in 2010 is connected with the near completion of the major projects Pipe Racks, Piles and Flares and completion of D-Island Rig Conversion Relocation of the D Island Rig 401 and Rig 402 and EPFC1.

Female employees (No.)



## welfare

To improve living conditions in the Kuryk Base, the construction of a sauna and a swimming pool started during 2010, and will be completed in 2011.

## our safety priority

The HSE Management System of Ersai was established and certified by Bureau Veritas Certification in accordance with the OHSAS 18001:2007 and ISO 14001:2004 standards.

The Health and Safety Managers are responsible for the implementation of the Occupational Health and Safety Management Systems (OH&S MS) according to the Republic of Kazakhstan regulations, corporate HSE procedures and instructions, Ersai work instructions, international regulations in the field of OH&S MS, and for monitoring and controlling the compliance with legal requirements.

Based on the annual Training Plan, approved by Ersai management, the HSE Department conducts different training courses for employees in order to ensure that all personnel are aware of the possible risks associated with their job. In addition to these training courses, Safety Committee meetings, safety stand-down meetings, periodical HSE campaigns, inductions at workplaces and daily toolbox talks are conducted to improve safety culture among employees in Ersai.

QHSE Award Ceremony took place on quarterly basis during 2010. The purpose of implementation of Quality, Health, Safety and Environment (QHSE) Award System is to increase QHSE Awareness and encourage the employees to take proactive actions in order to promote and improve the company's QHSE Performance during daily activities.

QHSE Award involved only site employees from Production (all projects), Asset & Maintenance, lifting and rigging departments. Managers of the departments submitted their best teams for award and a special committee verified these lists as per QHSE criteria. The gifts were special Vouchers of fixed amount to be spent in Aktau shops like electronics, domestic or sport goods. QHSE & Sustainability Manager during the first QHSE Award Ceremony: *'First of all, let me thank you for being here today to celebrate the first QHSE award ceremony for 2010. This is the 3<sup>rd</sup> QHSE Award ceremony in total and for this year the QHSE Awards are presented quarterly in line with Ersai policies and objectives aimed at recognising and rewarding the best employees, and individuals who make tangible contributions to the preservation and protection of Quality, Health, Safety and Environment not only in our Yard, but I think in the country as well. In our today ceremony we are going to reward the best 5 SHOC Cards, 5 Supervisors, 15 foreman and 131 workers from different trades: welders, pipe fitters, steel carpenters, etc. Also today we have a Special Reward to one of our employees who rendered a first aid to his colleague and saved his life, this special employee is a welder, and his name is Kashkabayev Omirbay. We call him Ersai Hero.'*



Alexander Kolesov, Port

## Safety Climate Analysis

Climate Analysis Questionnaire is the way to measure the perception of the employees toward the safety and environmental programs and activities developed in the Company.

As the result of the Climate Analysis, it can be summarised that it is important the full commitment of everybody to the initiatives that have been developed to increase the level of awareness like:

- the participation of all workforce in the training sessions and in the 5 Stars training (participation that at the moment is below expectation);
- the continuation of the LiHS cascade meetings held by the Management;
- the continuous support and commitment of Ersai Supervisory staff;
- further awareness of Ersai Supervisory staff on their crucial role towards safety.

Here below are listed some employees' suggestions recorded inside the questionnaire, for which the corrective actions have been already taken:

- all employees should receive the same PPE;
- winter PPE should be substituted more frequently (3 years is too long a period);
- more training with practical demonstrations was requested;
- recognition of best safety performance to be conducted on a monthly basis;
- request of new buses and new changing rooms/rest rooms.

## Leadership in health and safety (lihs)

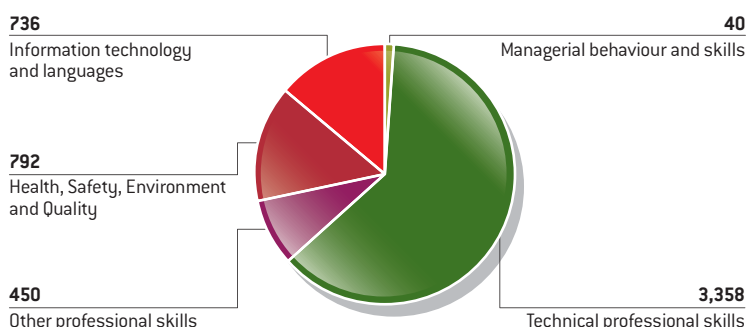
Ersai is also running a behaviourally-based training program called Leadership in Health & Safety (LiHS - previously Leadership in Safety). The main aim of this program is to change the culture of the whole organisation and shape into a safety culture one; for this purpose Dr. Pietro Franco Tali CEO of Saipem SpA decided to mandate and cascade a message encouraging all Saipem's personnel taking part in this cultural step change. This program is divided into 4 initial stages, which Ersai is successfully has been implementing.

The first stage is dedicated to all managers and leading supervisors: they are trained on how to be safety leaders and on how the company is committed to health & safety vision and requires all personnel commitment to it.

In 2010, the Ersai management decided to extend the program to the key subcontractors, like RBG, CIS, SGS, and partners (e.g. AKER Solutions) as an opportunity for both to align themselves to Saipem Health & Safety vision and

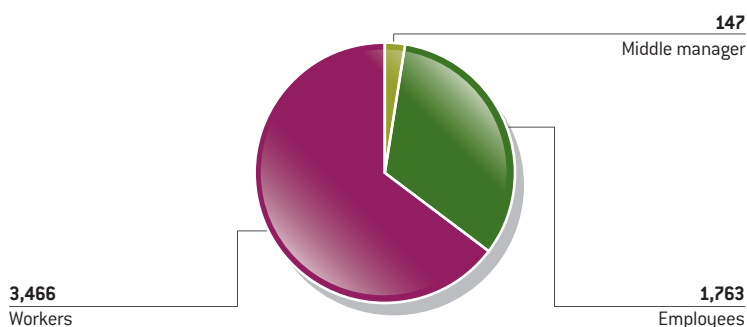
training hours per course type

(No.)



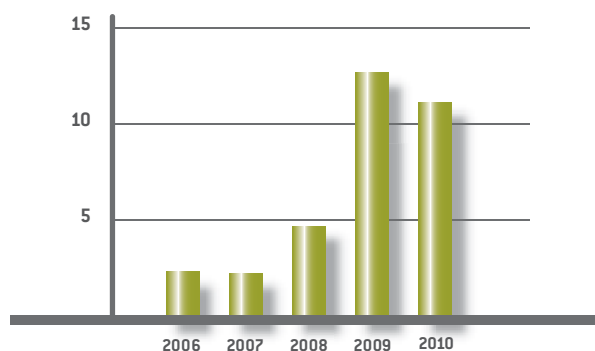
training hours by category

(No.)



safety awareness courses

(thousand training hours)



number of people participating in LiHS workshops

Years	PH1 - LiHS Workshops for Management	PH2 - LiHS Cascading down to workforce	PH3 Five Stars Intervention Tool
2007	46	-	-
2008	44	82	-
2009	64	1,656	236
2010	39	173	319
<b>Total attendees</b>	<b>193</b>	<b>1,911</b>	<b>555</b>

help in developing personnel Safety Leadership. During 2009 and 2010, Ersai Senior Managers hold several Cascading events (LiHS phase 2). These events were great opportunities to transfer to Ersai people the major message on Safety and Health and remind them about values, because safety should be a way of living both at work and home. 5 Stars Intervention Training (LiHS Phase 3) is a specific method, that has been developed to provide a simple structured guideline to facilitate an interaction between two individuals or between an individual and a group, in situations where there is a need for safety intervention or feedback. Ersai started to conduct 5 Stars Course in 2009 in three languages English, Kazakh and Russian. For this purpose a number of local facilitators were trained by Corporate LiHS Team.

### Achievements in 2010

- No fatalities (since 2005 zero fatalities has been recorded);
- 7,000,000 man hours (MHRS) worked without LTI in Piperack Project;
- 1,500,000 MHRS worked without LTI in IHUC Projects;
- D-Island Rig Conversion Relocation of the D Island Rig 401 and Rig 402 and EPFC1 successfully completed without LTI;
- start implementation of the Journey Management System and IVMS (device used to monitor the vehicle, in particular: speed; distance driven; acceleration/deceleration; driver hours; seat belt monitoring (where vehicle has seat belt sensor). This device has been installed on all light duty cars and buses of Ersai;
- start building the 'changing room/shelter'. Completion of structure, foreseen in 2011, will allow also a full control of PPE use when entering in construction area;
- start qualification of system/personnel and purchasing of equipment for introduction of 'Phased Array' in NDT activity. Full implementation of the system in 2011 will drastically reduce the exposure to radiation risk during NDT activities.

### Negative events in 2010

- No. 6 LTI;
- LTI FR & TRC FR targets not achieved;
- third party assessment of supervisors' safety awareness highlights necessity of implementation of their knowledge involvement and attitude in safety issue.

With the purpose of overwhelming the problems, the following targets were settled for the next year:

- to conduct specific training courses for Ersai Supervisors;
- training dedicated to Subcontractors;
- creation of Rescue team in Ersai Base;
- creation of HSE Patrolling car in the Ersai Base to be equipped with the necessary equipment;
- implementation of LiHS new campaign phase IV;
- upgrading of the HSE equipment and facilities;

- radio protection (monitoring of radio risks, through the establishment (or enhancement) of an effective system for the radio protection of the personnel);
- monitoring of health parameters in the industrial areas such as noise, vibration, lightening, etc.

## commitment to health promotion

A Health Risk Assessment procedure is in place for identification of the health hazards and for preventing occurrence of work related ill-health with employees. Ersai set good and safe workplaces and herewith aimed to eliminate and reduce deceases and ill-health in Ersai premises.

This year Ersai has started an internal monitoring of parameters for industrial health such as noise, vibration, lightening, and welding fumes. For this purpose, monitoring equipment has been purchased and will be utilised by Ersai employees to monitor health parameters internally and take necessary corrective actions on time without waiting external local authorities' inspection bodies.

For radiation monitoring, the Phased Array and TOFD (Time of Flight Diffraction), the advanced non destructive testing technique in Ultrasonic Testing started to be utilised. These techniques have significant advantage over the conventional radiographic testing using harmful radiations. Some advantages over conventional manual ultrasonic testing are a higher productivity, real time data (instantaneous results), defect characterization and accurate sizing (better interpretation and evaluation), permanent data achievability.

### accommodation and catering services

In 2010, Ersai underwent re-certification of accommodation and catering services. Certification of these services is mandatory



Ersai Clinic in the Kuryk Base

according to the Republic of Kazakhstan legislation; this gives evidence of the compliance with established requirements relevant to accommodation and catering. Training of Ersai Catering Subcontractors on Food Safety Management System HACCP 22000 has been organised by Ersai employees. This standard specifies the requirements for food safety management system. This training on the requirements for a food safety management system to the Subcontractor staff will help to improve the quality of catering services provided, thus improving quality of life of the personnel living in Kuryk.

### fitness examination

Ersai health service continuously monitors fitness status of all its employees, on a monthly basis. As a result 96% of local employees and 94% of expatriate personnel have valid medical fitness. In 2010, Ersai started to perform the annual medical examination inside the Ersai Fabrication Yard camp area. Periodical examination was performed by doctors from an external clinic, which has license for this type of activity and experience in performing medical examination. The commission of doctors included the following specialists: therapeutics, surgeon, dermatologist, neuropathologist, gynaecologist, oculist, and radiologist. 1,060 employees accounting for 87% of the total passed the annual medical check-up. This new organisation of the annual medical examinations conducted inside the base was useful to reduce the time of the trip from the Kuryk base to the clinic.

### cardiovascular disease prevention program

Cardiovascular diseases (CVD) are the leading cause of death in nowadays world and in oil & gas industry, and smoking is one of their main causes. Ersai developed the program to reduce CVDs and promote smoking cessation. In order to assure better health of their employees as well as to promote healthier and safer environment, Ersai has implemented Cardiovascular Disease Prevention Program since 2008. In 2010, 51 persons participated in this program. The good results were achieved with the help of medication. Comparatively less but still encouraging results were achieved in the field of change of behaviour and life style: smoking cessation, healthy food choice and weight control, increase of physical activity are direct or indirect consequences of health education. A crucial step in changing lifestyle is to set realistic goals for each individual. Treatment and lifestyle modification goals should be set in collaboration with the patient, taking into account the values and priorities of the patient.

## health performance indicators 2010

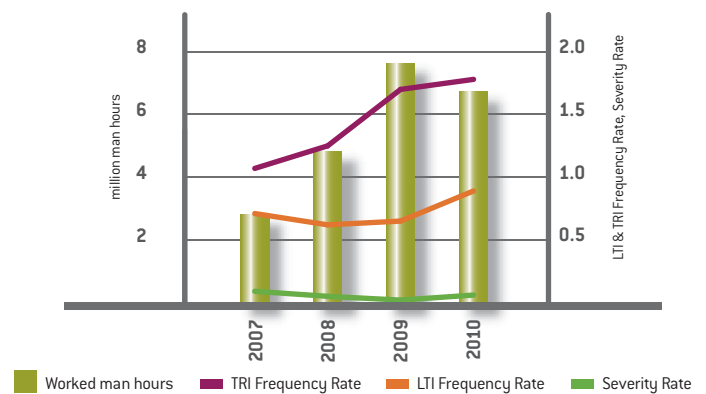
### Proactive HPI

- Total number of health training hours: 3,495
- Total number of employees taking part in Health courses: 1,642
- Total number of local employees taking part in Health courses: 1,585
- Total number of medical staff: 12 (11 of them are local)
- Total number of Vaccinations: 1,650
- Frequency of repatriation due to sickness: 0.29
- No. of personnel involved in First Aid Training Program / total number of workforce: 11%
- Health training hours among Kuryk school children: 192

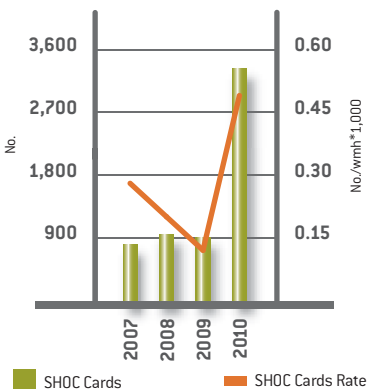
### Reactive HPI

- 1.35% of Ersai employees visited the clinic due to illness on a monthly average in 2010.
- 0.15% of Ersai employees were absent due to illness on a monthly average in 2010.
- Main cause of sickness are respiratory diseases (28%), digestive (9%), musculoskeletal (6%), and skin and subcutaneous tissue (5%) system problems.
- 63% of visits to the clinic were due to sickness, and remaining 37% related to follow up, vaccinations, Cardio Vascular Disease Prevention program and etc.
- 27 Medical Evacuation (Medevac) performed in 2010: 2 caused by accident (7%); 25 caused by sickness (93%). Main reasons of Medevac were sickness involving the digestive 22%, genitourinary 22%, respiratory 15%, nervous 15% systems.

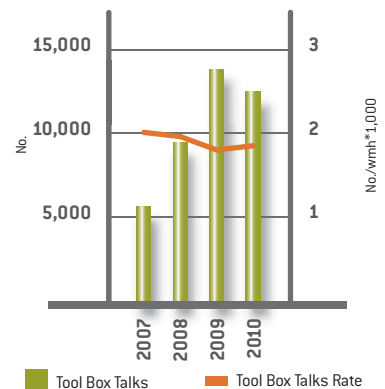
## safety performance



## shoc cards



## tool box talks



Number of SHOC cards increased in 2010, which gives good evidence of proactive attitude of Ersai workers to the HSE issues. Management commitment to HSE was improved by means of participation on HSE Meetings. Number of JSA increased twice compared to 2009. HSE training hours were reduced with the decrease of the personnel working on site. HSE Inspections increased compared to the previous year.



## environmental preservation

Ersai has in place an Environmental Management System certified in accordance with the standard ISO 14001:2004 requirements.

Ersai has identified the environmental aspects connected with its activities and analysed their influence on the environment. Significant environmental aspects are connected with the emission of polluting substances from the stationary generators working with diesel fuel and the oil products spills from in the jetty area. The company has implemented a series of measures to decrease the significance of such aspects.

The first activity was the connection of the Base with the electric grid of Kuryk that has allowed stopping several electricity generators. As a result, the overall emissions of hotbed gases were reduced of more than 50% and there has been a reduction of the risk of spills of diesel.

### oil spills prevention and mitigation measures

Oil spills during operations on the sea can cause serious damage to the environment, especially considering the environmental sensitivity of the Caspian Sea. All ships and barges are equipped with metal trays preventing any outflow of fuel. Besides, the company has bought materials and equipment for prevention of spills and clearing of water, including the modern biological absorbents for pollution. Moreover, a professional team has been identified to timely react in case of spills equipped with all necessary modern equipments.

For prevention of oil spills and timely response in case of emergency incidents on the sea, in 2010 the company carried out the following activities:



Oil spills response training





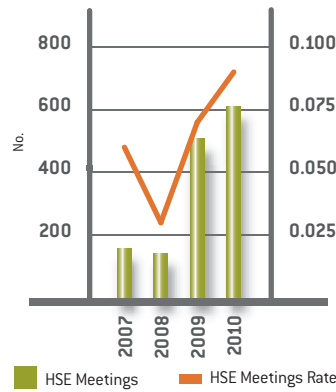
Ersai waste water treatment plant

- new equipments for prevention and cleaning of spills were received: skimmer with pump station, additional booms, and different kinds of absorbent materials including moss for new biological methods of cleaning;
- training on 'Offshore and onshore oil spills prevention' for 315 employees who work in places with potential oil and chemical spills or involved in oil spill prevention process;
- one emergency drill was realised in July together with safety and medical departments, the Port Management and Agip KCO's representatives. The emergency drill was carried out on the sea with all manoeuvres; unroll booms and use of absorbent materials. Mobilisation time of all resources from the receiving of emergency signal was 25 minutes;
- preparation of special boxes and purchased of special new chemical spills kits for prevention and clean up in case of chemical spills in six places identified as with potential spill occurrence in the Ersai base;
- in 2010 Ersai started the construction of special metal trays for spill prevention from mobile generators, hitters, transport, etc. First 25 trays were prepared. Such trays were provided for all barges and modules working in the Kuryk port in order to avoid spills from equipment. The activity will continue in 2011.

## improvement in waste management

In order to optimise the waste management process, new waste containers were installed and a new fenced waste transfer station was created and divided into 4 sections for collection and separate storage of domestic, metal,

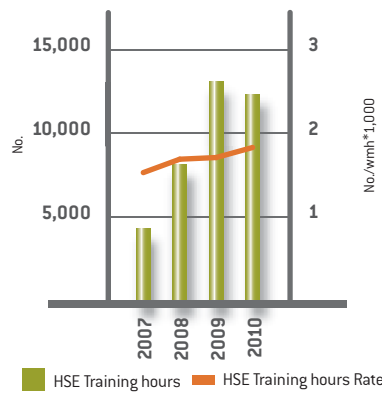
### hse meetings



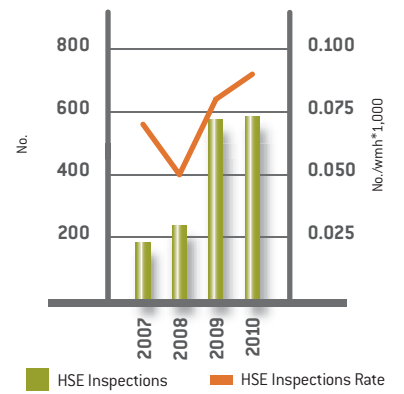
### job safety analysis



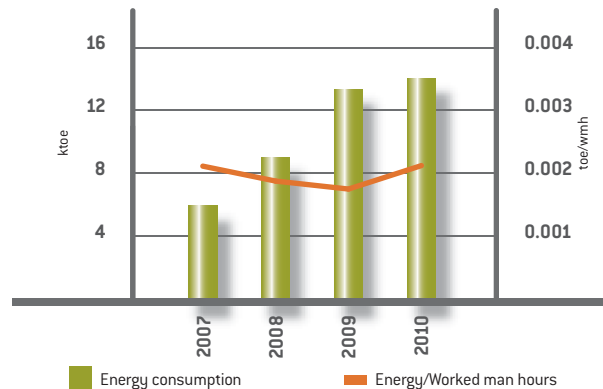
### hse training hours



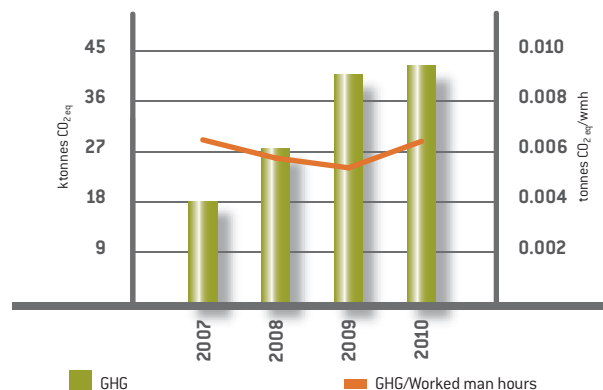
### hse inspections



### energy consumption and rate over worked man hours



### greenhouse gases and rate over worked man hours



wood and hazardous wastes. Moreover, for an optimisation of the waste removal process a new garbage removal truck was used; it is able to remove wastes directly from the construction site reducing the risks for soil contamination during storage and optimise waste removal schedule.

## water management

**Expansion of Sewage Treatment Plant:** in 2010 the expansion of the Plant started to increase its capacity from 840 to approximately 1,500 m<sup>3</sup> per day. Two additional evaporation ponds were constructed and equipment purchased. For the treatment of sewage water, the company is planning to use new progressive resource-saving and ecologically effective technology. The project will be completed in 2011.

**Expansion of Desalination Plant:** for the full supply of the construction Yard with drinking water, the increase in the capacity of the desalination plants of 2 times is in process. New special shelter for equipment was constructed together with purchasing of the equipment. The project will be completed in 2011.

## ersai green corner

An area of 0.5 hectare inside the Ersai base was planted with 1,387 different kinds of trees species creating the 'Green Corner'. A special automatic irrigation system was constructed, which uses treated water from the sewage treatment plant, with a capacity of 900 m<sup>3</sup> per day. The Green Corner improves the quality of the area while effectively reusing the wastewater.

## environmental training

In 2010 the following training activities were carried out:

- Waste management system of Ersai: 800 hours;

- Onshore & Offshore Oil Spill Response: 315 hours;
- Legal & Other Requirements on Environmental Protection: 53 hours;
- Mercury containing waste handling: 47 hours;
- Environmental Management System of Ersai: 211 hours;
- ISO 14001 General Requirement and Environmental Policy: 47 hours;
- Environmental Aspects: 165 hours.

## environmental monitoring

Ersai has set up a monitoring system and program to check the impacts of the activities on the environment. Monitoring activities focus on air, sea water, underground water, radiation and soil conditions, in accordance with RoK legislation and quality standards. Results show that the presence of the Fabrication Yard and its activities does not affect the overall status of the surrounding ecosystem.



Ersai Green Corner

# company citizenship

Ersai is strongly committed to working responsively and contributing positively to the socio-economic development of the communities.

Every year, Ersai establishes a Sustainability Plan, based on the analysis of the needs of local community, focusing mainly on activities for health promotion, education, socio-economic development, culture and environmental protection.

During the last year the following activities were carried out.

## relation with local authorities

Experience demonstrates the importance of frequent, continuous contact and dialogue, both formal and informal, with the authorities. Maintaining regular dialogue with several governmental departments and regulatory bodies is the main priority for an effective community engagement.

In 2010, Ersai conducted several meetings with local

stakeholders, like the Regional Department of Education, Local Schools, the Central Kuryk Hospital, the Kuryk Labour Department, Kuryk Akimat, etc., to inform them about the progress of the Ersai Sustainability Plan. During the meeting, unresolved or pending items were discussed, and each part took the necessary actions. Ersai and local authorities worked together in order to achieve a common objective for a socio-economic development of the region.

For further improvement of the relationship with local authorities, a focal point was established in Ersai to work and relate with them, for any issue that may arise.

## socio-economic development

In the context of the Sustainability Plan, a series of activities has been activated for socio-economic development of local communities. In particular, the focus on youngsters and their education and wealth is an essential aspect to guarantee a future development for local communities.

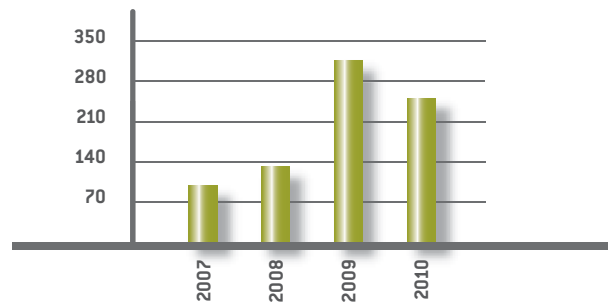
In 2010, Ersai continued with ongoing programs, such as the 'Ersai Basketball School League' as well as the reconstruction of the Aktau Basketball playground. The grand opening of the new basketball playground took place in August 2010 at the presence of the local community. Ersai renovated the playground with a modern multi-coating, consisting of sand, rubber, acrylic and other components that made it possible to achieve excellent cushioning ball, but also avoid possible injuries. *Encouraging a healthy lifestyle in the city – not just words, and the opening of the new court proves it. First and foremost I would like to thank the company Ersai for what they have done as a gift to townspeople. The more in Aktau there will be similar courts, the more children will be indulged and engaged in their favourite sports, instead of wandering pointless in the streets. Only sport can give to youth a bright future – said Sergey Pakhomov, Head of Department of Tourism, Physical Culture and Sports of Mangystau region.*

*Our company is firmly convinced that the best and most reasonable investment is the investment in children's and youths' sport. The company's mission is to give the younger generation of this city a place where they can realise themselves and release their energy. Thus, we can keep them away from the negative influence of the streets – said later Camillo Ceresa, General Director of Ersai.*

The sport centre was opened in order to train young

### water consumption

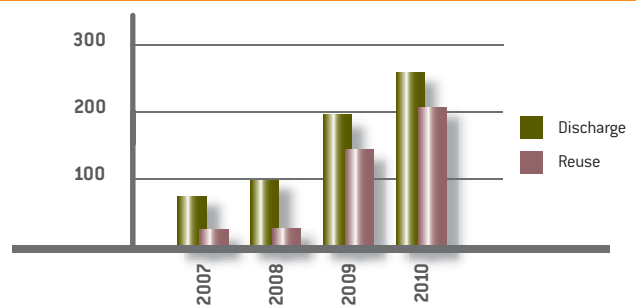
(thousand m<sup>3</sup>)



Increase in water consumption is mainly due to the supply water to the offshore operations.

### water discharge, reuse

(thousand m<sup>3</sup>)



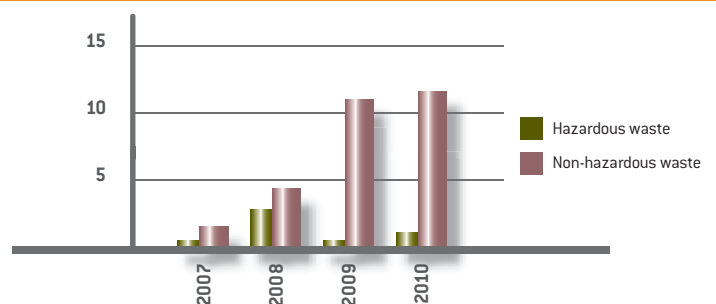
The increase of water discharge is mainly due to the sewage from offshore activities that needed to be disposed.

### waste produced and rate over worked man hours



### waste produced

(ktonnes)



The increase of waste production in 2009 and 2010 is mainly due to the increase of the construction activity for this period; in fact 2009 and 2010 was a peak of activity in the Yard. As compared with 2009, in 2010 the quantity of reused and recycled materials increased by 10%. Total quantity of waste sent for reuse and recycle increases more than 50% in 2010.



children coming from twelve schools of Aktau, Kuryk and Mangyshlak settlements. Ersai supported the basketball League with new sports uniform, balls and the main prize, which is the main incentive for children to participate in the basketball league. As a result, more children started to be involved in a healthy way of life. The meeting with the subcontractors on sustainability issues resulted in an involvement of one of the main Ersai subcontractors, RBG Kazakhstan, to support this basketball school league.

Summer Internship for Kuryk students was organised for 60 students from needy families, where they have been working part time in Kuryk schools carrying out landscaping and refurbishment activities like cleaning the school facilities, planting, painting activities under the strict supervision of their teachers.

Upon completion of the internship, students received their monthly fee in the amount of 15,000 tenge from Ersai. This internship gave the students the opportunity to work and earn money while being involved in the social life of the region.

## health promotion

With the support of Ersai, the rehabilitation centre for disabled children has begun its activities in Kuryk. Now disabled children from Kuryk have an opportunity to play in a place

where everything is considered for the development of the child. By means of special equipment installed in the centre, psychological support is provided and social adaptation of children and their parents is carried out.

The given project is realised under the initiative of the youth public Fund 'Urpak Next' with the support of Ersai. 'The similar centre for disabled children is already present in Aktau and gave already good results', said Gulzhanat Muratbay, Director of the Fund. The equipment used in the rehabilitation centre consists of various games and teaching materials used according to Maria Montessori's system – the famous Italian psychologist who promoted an individual approach to each child. *'We have already noticed the good results of children going to a similar centre opened in Aktau. Many became more open and cheerful. I hope that this centre will help children of Kuryk to improve various talents'* – has emphasised Gulzhanat Muratbay.

As the continuation of the Cardio surgery program, 2 qualified doctors came to Kuryk, to make medical screening to all children with congenital heart disease, and identified 6 children to undergo surgery. The first child underwent surgery with good results.

Under the health campaign program, Ersai medical specialists provided health courses like first aid, STD, non-alcohol and non-smoking campaigns, thus totalling 192 training hours. School teachers have already pointed out the advantages from the campaigns provided by Ersai.



Initiatives for local communities

## education

In the context of the Memorandum of mutual cooperation with the Karaganda State Technical University, this year Ersai has provided welding equipment, as a contribution to the training of local welding specialists.

On July 29, 2010, Saipem Corporate visited the Karaganda University with the purpose of discussing the future relationship in the frame of the signed memorandum, with the establishment of an International Welding Institute branch between the Italian Welding Institute and the Karaganda State Technical University.

Under the Memorandum of mutual cooperation concerning the development of innovative technologies, the preparation and increase of qualifications of specialised people in the oil and gas, construction, mechanical engineering and metallurgy, signed between Ersai and the Kokshetau University, computers and other ICT facilities were purchased and provided to the University for a total amount of 3 million tenge.

In the period 2009-2010, Ersai launched a scholarship program. The main purpose of this program is to support students from needy families by financing their university study at one of the State Universities of Kazakhstan. It was initially planned to choose 5 students with good scores on National Testing Exam and from low-income families, but finally 6 students were selected, and they are now studying in different faculties of the Karaganda State Technical University, such as welding, mechanical, construction, etc. Ersai will provide tuition payment for 5 years, a monthly allowance of 25,000 KZT, and transport costs. The agreement was signed between Ersai and the students, where the students are required to attend the courses in a professional way, and later on to work in Ersai for a minimum period of 5 years.

The first 3 students selected took part in the summer internship in the Kuryk Base, during which they worked in different departments like training centre, quality control and document control.

In 2010, Ersai safety trainers conducted safety courses in Kuryk schools, mainly in school No. 1, school No. 6 and gymnasium No. 1. The subjects of the trainings are 'Safety in classrooms and Ergonomics' between 5<sup>th</sup> and 8<sup>th</sup> forms and 'Road Safety' between 2<sup>nd</sup> and 4<sup>th</sup> forms. The main purpose of these trainings is to make aware about hazards in school and at home.

During the training, safety trainers showed movies about road safety and distributed some materials like sport exercises for pupils. Schools teachers thanked safety trainers and showed appreciation for the topics presented.

## environmental protection

In 2010, Ersai started an awareness campaign in Kuryk village, in order to improve waste collection and segregation. Thirty waste containers were purchased and located in different points within the village of Kuryk.

Moreover, environmental campaigns are conducted on regular basis by the environmental department specialists. In 2010 Ersai conducted training on 'Let's take care of the Caspian Sea' in secondary schools in the village of Kuryk.

Due to recent negative changes in the population of species of marine animals, birds, mammals, etc., the main goal was to instil in children love and care for nature, through training in compliance with all rules of life and the proper use of natural resources, and to give general information about environmental problems and disasters, in particular arising from oil spills.

On the occasion of Environmental Day on June 5, 2010, environmental department conducted voluntary Saturday work outside the base, where all employees were invited to take part.

## culture

Ersai took active participation in the commemoration of the Holy Sufi Beket-Ata. It was dedicated to his 260<sup>th</sup> birthday. Beket-Ata is known in the Muslim world as a prophet. Beket-Ata Necropolis is a spiritual, historical and architectural memorial.

On the occasion of the 65<sup>th</sup> Anniversary of Great Victory, Ersai hosted a special Victory Day and Nauryz event. The official ceremony took place in Ersai offices where the company's representatives paid tribute to the present veterans. The chief of the Society of Veterans of WWII of Atyrau Mr. Umar Tairovich thanked the company for its contribution to the regional social development. Moreover, the company organised the Ersai Cup Tournament in Kuryk Village. The main aim was to promote healthy life within the Community. The contest took place on May 9. The program of the tournament included running at different distances, broad jump, shot put, and 4x100 race for schoolchildren and for adults.

The Bike Trophy 2010 event was held for the third year. The bike tour took place in September, passing through the Karakiyan District in the eastern direction of Bozzhira Reserve, located about 320 km far from Aktau. The aim was to create team building, promote cycling, and involve several Ersai volunteers' personnel in sport events. The first Bike Trophy was organised in 2008 to celebrate the 5<sup>th</sup> Anniversary of Ersai Caspian Contractor Llc and the route was designed to pass from the Kuryk village to Zhanaozen and 'Becket Ata' Necropolis.

# methodology

This is the first annual Sustainability Report for Ersai Caspian Contractor Llc. Apart from providing information and figures of Saipem Group's consolidated Sustainability Report (www.saipem.com), this year Ersai has decided to prepare its own Sustainability Report, to describe its vision and commitments but also to present its engagement and performance in relation with its stakeholders. The Report has been prepared in accordance with the principles of materiality, stakeholder inclusiveness, sustainability context and completeness. The document is aimed at providing a comprehensive view of Ersai's business, by reporting the Company's operations according to their qualitative and quantitative features.

The selection of contents presented with this Sustainability Report has been made in accordance with Saipem Group Sustainability Report, Ersai operations conducted during the reference year, and issues considered important for Ersai's stakeholders. The document covers all Ersai's operations and projects conducted in 2010. The data included in this Report come from the company's official management and reporting systems of the different functions, whose subjects are therein discussed. Whenever possible, the last three accounting years are reported.

# glossary and acronyms

### FA Cases Rate

First Aid Cases Rate = (First Aid Cases/Total man hours)x10,000

### HSE

Health Safety and Environment

### KZT

Kazakh Tenge

### Lost Time Injury (LTI)

A LTI is any work-related injury, which renders the injured person temporarily unable to perform any regular Job or Restricted Work on any day/shift after the day on which the injury occurred. In this case 'any day' includes rest day, weekend day, holiday.

The day of the Accident is not counted when calculating Lost Workdays. Fatalities and Permanent Total Disabilities are included in the

calculation of the total the number of the Lost Time Injuries.

### Lost Time Injury Frequency Rate (LTIFR)

$$LTIFR = \frac{\text{No. LTI} \times 1,000,000}{\text{Total worked man hours}}$$

### Lost Workdays (LWD)

The total number of calendar days on which the injured person was temporarily unable to work as a result of a Lost Time Injury. In the case of a Fatality or Permanent Total Disability no Lost Workdays are recorded. If the Fatality occurs after several Lost Workdays, both the Fatality end the Lost Workdays have to be computed.

### Severity Rate

$$LTIFR = \frac{\text{No. LWD} \times 1,000}{\text{Total worked man hours}}$$

### Stakeholder

A company stakeholder is a party who affects, or can be affected by, the company's actions, such as: Employees; Customers; Shareholders; Suppliers; Labour unions; Government regulatory agencies; NGOs and other advocacy groups; Local and national communities; Competitors.

### Total Recordable Incidents (TRI)

Term to define the sum of Lost Time Injuries (including Fatalities and Permanent Disability Cases), Work Restricted Cases and Medical Treatment Cases.

### Total Recordable Incident Frequency Rate (TRIFR)

$$TRIFR = \frac{\text{No. TRI} \times 1,000,000}{\text{Total worked man hours}}$$





**Ersai Caspian Contractor LLC**

*Head Office*  
Business Center 'Sunkar'  
Microregion 2 Bldg. 47 B  
130000 Aktau - Mangystau Oblast  
Republic of Kazakhstan  
[www.ersai.kz](http://www.ersai.kz)



**saipem**

*Headquarter*  
San Donato Milanese (Milan), Italy  
Via Martiri di Cefalonia, 67

**Feedback**

What you think of the Sustainability Report matters to us.

As we are constantly striving to improve our reporting, we would very much welcome your feedback. We will also be pleased to answer any questions you may have.

Contact  
[sustainability@saipem.com](mailto:sustainability@saipem.com)

Some of the photographs that illustrate this Report were taken by Saipem's employees who participated in the 2010 edition of the internal Sustainability photographic award.

Special thanks to all those who contributed to the elaboration of this report

Website: [www.saipem.com](http://www.saipem.com)  
Operator: +39-025201

Layout and supervision: Studio Joly Srl - Rome - Italy

[www.saipem.com](http://www.saipem.com)