

Integral Consulting R&D Romania is a privately owned company, having as domain of excellence Research-Development-Innovation and consultancy activities in the field of rolling stock and railway transportation. Being a RDI firm in this domain, Integral Consulting R&D is the only company authorized by the Romanian Railway Authority –AFER and also by the Ministry of Research and Education.

We approached in our projects different research and interest themes, which had as primary objective improving the technical and qualitative level of rail products and services, the consolidation of knowledge-based business management systems, the development of international partnerships in the scientific and technological field, and most importantly, a constructive feedback from our clients.

We developed and evolved through complex projects in the field of rail transport, consolidating our expertise and defining ourselves as serious partners for any company within the country and from the European Union market also.

In the desire of supporting our partners, we are trying to offer solutions for certain specific and distinctive needs from one partner to another, by developing performance, efficient and 100% personalized applications.

Among the projects elaborated by our specialists, we mention the modernization of some locomotives by the implementing on board controller-assisted commands and protections, starting with year 1992: SP32 locomotives, SM42 locomotives (Fablok) and T448 (CKD), all made in Poland, then locomotives for China, for Alstom and CFR Calatori (National Railway Transport Company for Passengers), metro train, etc.

Year 2007 meant an important start-up for the evolution of the company as well as for the general and personal accrual of experts.

An ample project developed through the Innovation Programme, as it is project „SIMDLOC – Modernization systems for locomotives”, constituted an opportunity for new approaches and completeness of know-how, and for the initiation and consolidation of some international partnerships. The project came first at the national tenders contest for the CDI Innovation 2007 Programme.

The modernization of shunting locomotive LDH 1250 HP for remote control, resided in the integration of performance equipments, some extremely specialized, especially configured for this application, and in settling some problems regarding computed assistance of exploitation and maintenance activities for locomotives and reducing their costs. The original modernization solutions package can not be found on any other locomotive from Romania. The solutions that were integrated on the shunting locomotives type LDH 1250 HP, indicate some of the most spectacular applications for vehicles (locomotive radio remote control, automated coupling, etc.), special and specific protections and modern product management systems, software packages particularly made for this application by Integral Consulting R&D. A strong point of the team that built the modernized shunting locomotive was its experience and expertise in the field. Members of the team took part at the creation of over 7000 locomotives and rail cars (in over 80 variants), manufactured by Faur Bucuresti company, out of which, more than 3000 were exported in more than 30 countries. A plus in our activity was gained through the collaborations and permanent contact with firms and specialists from the field (SIEMENS, ALSTROM, BOMBARDIER, MTU, VOITH, Caterpillar, etc.).

We have the satisfaction of fulfilled labor. Today, 10 shunting locomotives modernized by our firm are being exploited at the AcelorMITTAL Galati steel plant – part of the biggest global player on the steel market, and functioning without problems for over 2 years.

By doing so, we became the only integrator from Eastern Europe which realized, tested and validated these kinds of products.

We owe part of our success to our strong external partnerships, which we built during time with prestigious firms like: CATTRON–Theimeg, Knorr-Bremse, Selectron, Finder, Gessman.

The presentation of the modernized locomotive at the Research Exhibition during the Bucharest International Fair from 2008 and mainly during the most important global fair for rolling stock – InnoTrans 2008, Berlin – at the CATTRON-Theimeg stall, facilitated the wide advertising of the product, but also of the company and its experts.

The national and international echo of our research success contributed significantly to the acknowledgement of the expertise and abilities of our company’s experts, and of the interest we show for ambitious and provocative approaches, by specialists renowned in the European scientific research. It was an important step in the evolution of Integral Consulting R&D by means of the offers to participate alongside them at strong European consortiums, in ample projects for research, technological development and innovation.

Year 2009 is the year of European projects, as a logical step towards the integration of Integral Consulting R&D Romania. Our objectives are ambitious, but realistic.

- Therefore, at this moment we are already working in 2 UE projects, respectively:

- TransNew Project – “Support for realizing new Member and Associate States’ potentials in transport research” – Coordination and Support Actions, FP7TPT2008.8RTD, coordinator NewRail-Newcastle University UK.

TransNew covers all transportation modes including aeronautics, and has as scope the evaluation of research capacity in order to support the implication of new Member States in a number of themes and in order to give the possibility to exploit the synergies between aerial transportation mode and the surface transportation one.

- ECORailS project – “Energy efficiency and environmental criteria in the awarding of regional rail transport vehicles and services”, call CIP-IEE/08/690-2008, coordinator TSB Innovationsagentur Berlin GmbH.

The project proposes a new approach to the energy – efficiency and performance relation, by developing some criteria for evaluating and validating the rail products. If up until now, at European level, this relationship was approached bottom-up (Train Operating Companies, infrastructure managers, system integrators and stakeholders), the ECORailS project treats this problem as a top-down responsibility, the target group being directly the political and administrative decision factors responsible for railways, and focuses on the efficiency of rail sector from an energy efficiency point of view.

- one project is being evaluated at this time by the European Commission, respectively:

- Project PRO RAIL LEARNING – Lifelong Learning Programme – Leonardo da Vinci

- one project is being elaborated, respectively:

- ACT4RAIL project

The European market is becoming the “scene” for our future actions, on which we intend to evolve together with our partners.

We will consolidate our projects and partnerships, we’ll start some new ones and we’ll extend through the replication of the success projects we had so far. It is an expected step for a company which always tries to adapt its offers to the market demands and the individual needs of its clients, to the requests imposed by the continuous evolution of the business world. At the same time, this is a necessary step in optimizing the activity and evolution of Integral Consulting R&D company.

We are trustingly waiting to know also other partners together with whom to participate at EU projects in this field or in related ones.

General Director,
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