

**Search for a Spanish Partner for a
Bilateral R&D Project (this document will be shared with potential Spanish
companies)**

Organization	
Date of Request:	20 / 02 / 2019 NB. First request email sent to Mr. Elmrbabet on Jan. 25 th , 2018
Company name:	Ecole Nationale des Sciences Appliquées d'Oujda "ENSAO" (Public Engineering School) Altran Maroc (Company)
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SECTION 1: Your Company Profile

(Please give brief / to the point explanations. For more explanation on any point below, you may add a short paragraph as an annexure, with this document.)

Business Sector	AUTOMOTIVE AERONAUTICS RAIL, INFRASTRUCTURE & TRANSPORTATION ENERGY INDUSTRIALS & ELECTRONICS SPACE, DEFENSE & NAVAL
Company mission or core functions	ENGINEERING AND R&D SERVICES 6 KEY ACTIVITIES Consulting, Digital, Engineering, World Class Centers, Industrialized GlobalShore®, Innovative product development
Date of establishment	1990

Ownership (if public and traded, add stock exchange and ticker symbol)	Please visit the website: https://www.altran.com/ma/fr/
Total number of employees	More than 1000 in the Moroccan site
Number of employees in R&D	More than 2/3 of the employees
Key products sold or services provided	Please visit the website: https://www.altran.com/ma/fr/
Company core technical competences	Electrical and computer engineering
Key R&D programs and activities	POWERTRAIN & ELECTRO MOBILITY COMPLETE VEHICLE DEVELOPMENT Autonomous Driving Software-defined vehicles Cybersecurity in automotive
Examples of accomplishments	Please visit the website: https://www.altran.com/ma/fr/
Company strategic orientation	Please visit the website: https://www.altran.com/ma/fr/

SECTION 2: Partner of Interest

(Please provide a brief summary of the prospective partner company or organization. This summary may address some or all of the points below)

Profile of ideal technology partner	Product Designer and/or Manufacturer, Product Installer, or Service provider.
Core technological competencies and expertise	Charging station installation for Electric Vehicle. Battery charger for Electric Vehicle. Battery pack for Electric Vehicle. Electric/Electronic circuit design and manufacturing.
Other essential qualifications (e.g.: ownership, track records etc.)	
If you have a list of companies with whom you are in contact or interested in contacting, please provide contact details	
If you are interested in collaboration: please specify details and other important information you want to share with a potential company	The objective of the project is to develop a new type of high-power integrated motor drive and battery charger for electric vehicles. Compared to today electric vehicle chargers, the new system is expected to reduce the cost by around 1,200€ and

	<p>shorten the charging time to two hours. This project will induce at least one product patent.</p>
<p>Interested areas of collaboration</p>	<p>EV Charger</p>
<p>Specific R&D contribution you are seeking/offering</p>	<p>We expect a contribution in one or more of the following tasks:</p> <ul style="list-style-type: none"> - Experimental study of the impact of bi-directional charging on commercial Lithium-ion battery. - Contribution to the design of on board Bidirectional Charger Traction Drive. - Installation of the demonstrator and System validation. <p><i>For more details on the project proposal please see the attached summary.</i></p>

Signature

Name: Driss Yousfi

Date: 20/02/2019

