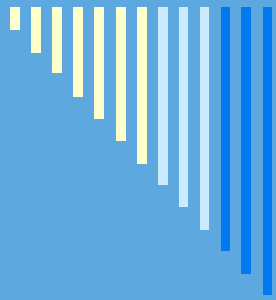


An SME vision of a Technological Core Facility for the transformation of seaweeds

Franck Hennequart
Technical Director, **Oilean Glas Teo**
Co-associate, **Oceanide**



Thursday, the 25th of August 2011
Networks as Knowledge –
Biotechnology Networks in the Atlantic Area
ShareBiotech Project



Oceanide

Oilean Glas Teo (OGT)

Typical R&D needs for SME innovation

Main Issues

How TCF and Networks can help ?

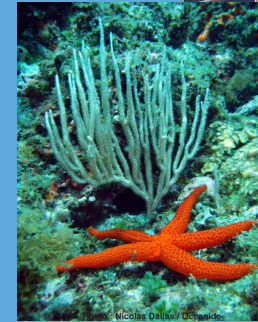
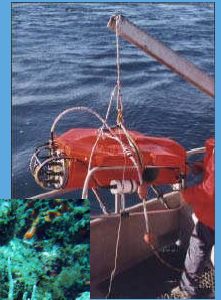


OCEANIDE



Created in 2006 – 5 co-associates (2 full time)
in 2011: 4 full time (3 engineers + 1 master)
+ 1 PhD + master students

4 Professional divers including 1 instructor

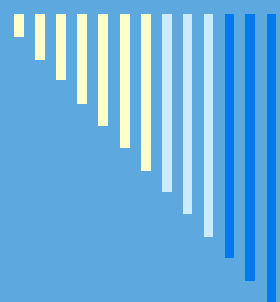


Consulting coastal environment & marine resource management

- Marine Protected Area management (surveys, training...)
- Artificial Reefs Management (2 Mediterranean Sea, 1 in Atlantic Ocean)
- Marine environment impact surveys (constructions, ecological, aquaculture...)
- Marine Aquaculture technologies and regulations (larvae transport, quarantine...)
- Marine resource processes (fish oil and proteins, waste management...)
- Marine environment and product desktop studies (fishmeal, bioactives, biofuels...)

France, French Polynesia, Madagascar, Spain, Middle East, Peru, Ireland...

www.oceanide.eu



Oilean Glas Teo (OGT)

Cold process seaweed extracts (mainly liquids)

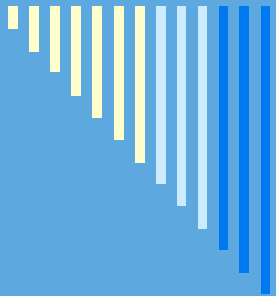
- Created end 2003 – 1 year ½ process and R&D
- Commercial since early 2005 – 16 employees in January 2011
- Main markets – **Biostimulant sport Turf: Golf courses, Stadiums... & Production Fruits & Vegetables (2007)**
- Markets in development – Animal & Human Health, cosmetic
- 20 known countries – 24 Distributors – 2 Agents (USA, Germany)

Golf courses

Stadiums

Conventional & Organic agriculture: citrus (Spain, Italy, Brazil...), Apples (UK, France, Switzerland...)
wine grape: France (Champagne, Bordeaux), Italy, Spain, Chile

www.ogt.ie



Oilean Glas Teo (OGT)

Key to OGT: **cold extraction process**

Fresh hand-harvested Seaweeds
unique quality

OGT unique
Extraction Process

Cosmetics

Marine functional
ingredients

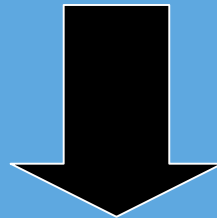


Animal Health Products
Feed Ingredient accreditations

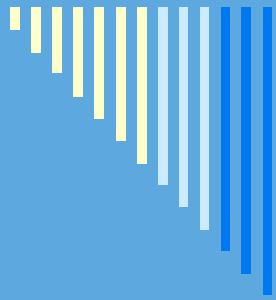
Seaweed
Liquid
Extract
(OGT)



Liquid Plant Biostimulants

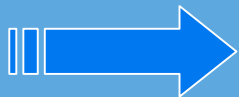


www.ogt.ie



Oilean Glas Teo (OGT) – R&D Needs

- Deeply R&D based – Strong research collaborations
- Innovant products on existing markets
- Supportive, Active and Experienced Shareholders



Every year and again the first 6th months 2011: major sales increase

But, long term growth continuity relies on:

- Existing markets:
- Product / Process improvement – formulations
 - Field trials
 - Market demand adjustment
 - Relevance to market regulations
- Novel markets:
- Product process / Product design
 - Relevance to market regulations
 - Veterinary trials / clinical trials...



OGT & Seaweed Ind. SME R&D Needs

April 2008: 18 companies Irish Seaweed Industry (Marine Institute, E.I., BIM)
*Aer Ltd; Algaran; Arramara Teo; BioAtlantis; Blath na Mara; Brandon Products;
Corail Feamainne; CyberColloids; CyberColours; Dolphin Sea Vegetables;
Irish Seaweed Processors; Lotide Fine Foods; Marigot Ltd; Oilean Glas Teo;
Red Bank Hatchery; Ri na Mara; Seavite Bodycare Ltd; Voya*

September 2008: agreed on common needs

Limits to further commercial development:

- Knowledge of chemical & biochemical composition of the seaweeds

Limited amount of scientific information:

- Validated & replicatable techniques for processed samples
- Seasonal & site variations
- Effects of existing industrial processes
- Bioactivity of key components
- Stability
- Contaminants

Common Basic Need For:

- *Safety Data & REACH*
- *Market claims*
- *National and International Regulations*
- *Traceability*



OGT & Seaweed Ind. SME R&D Needs

Oct 2008: agreed on research workpackages & Applied

WP A: *A status of current knowledge*

WP B: *The raw material, its analysis, its potential*

WP C: The processes, their effects and new techniques

E.I. Industry-Lead Research Programme *Bioactive compounds from seaweeds*

Dec 2008 – Feb 2009: Open tender for research proposal applications

March - June 2009: Evaluation & Selection of consortium

July 2009: Re-submission of the modified proposal by research consortium

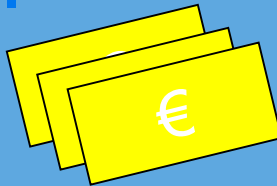


All initiative failed

- uncertainty of funding availability at the time
 - then de-motivation of industry consortium
 - disagreement between few industry partners on follow up
-

SME Needs – Main Issues

Cash Money



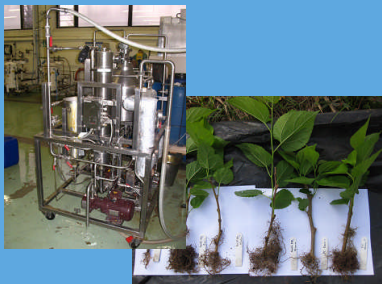
Funding agencies: increasing demand for cash involvement

——> affect cash flow

advance payments before refund

——> affect cash flow

Equipment



Pilot processing equipment: run multiple trials

Analytical capabilities: formulation & design

Applied trials: assess product functionality



People



Manage technical part of project

Manage accountancy part of project

Market prospect





How a Biotech network / TCF can be useful?

Cash Money

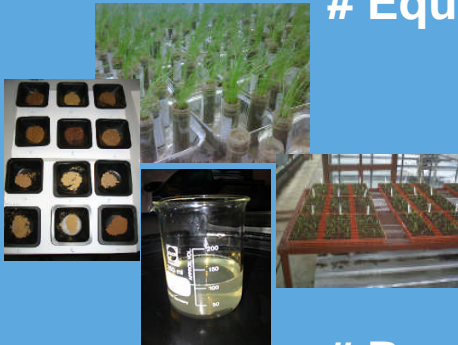


No real help on cash involvement – orient on funding opport.

Encourage development of adapted SME consortia:

- regroup cash
- multiply “In-kind” participants (reduce cash)

Equipment



Provide platform of pilot units to run trials

Provide platform of analytical/research labs

Provide platform of companies/research group setup for trials

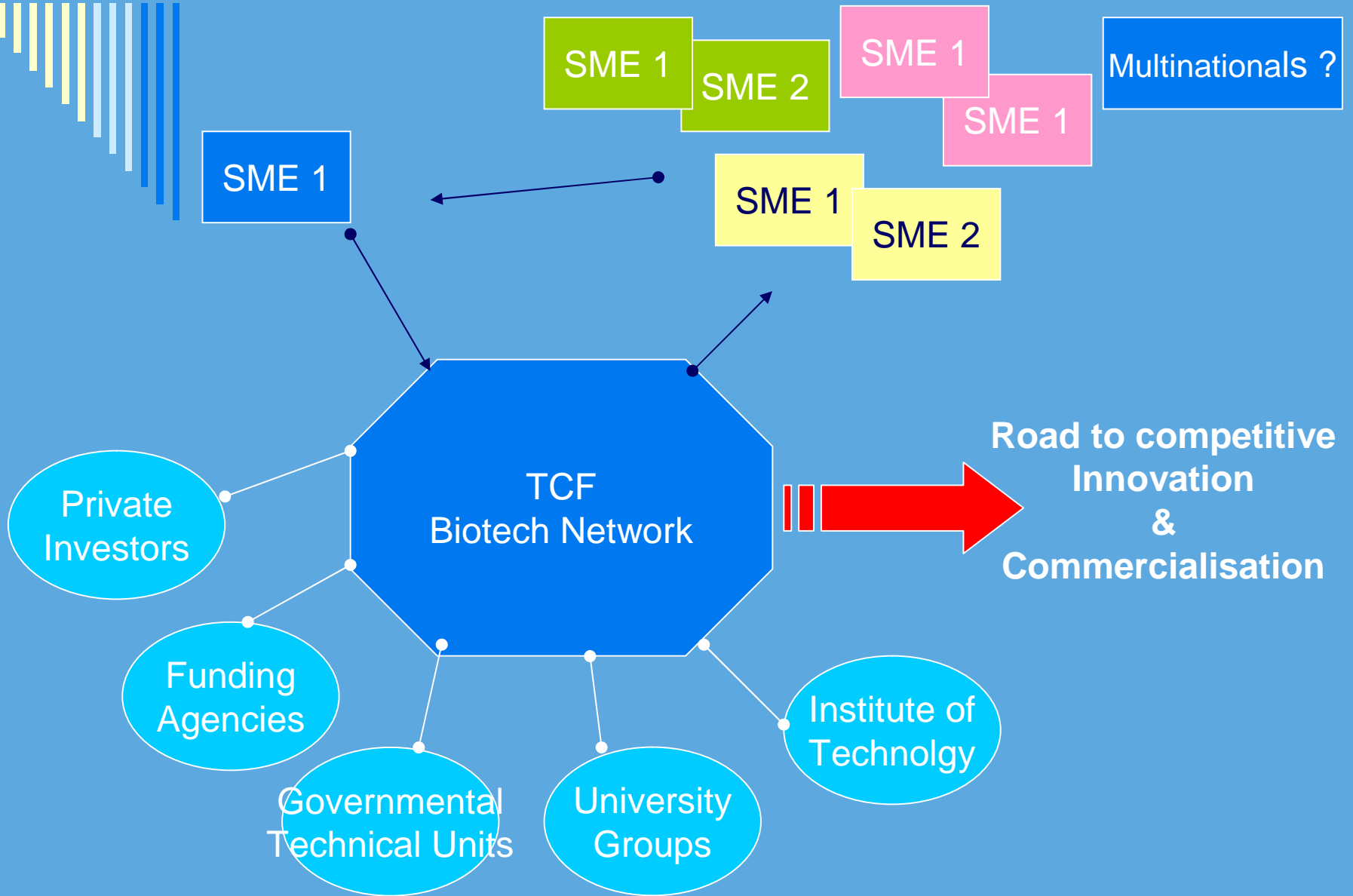
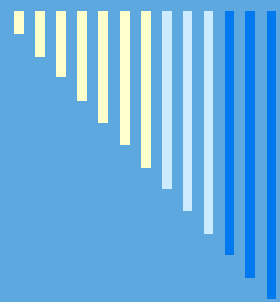
People



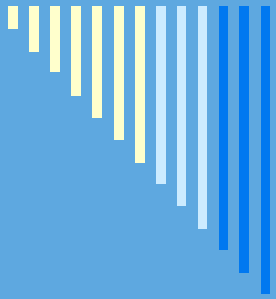
Identify capabilities, mainly in ITs, Applied Research Groups

Provide support in grant account management

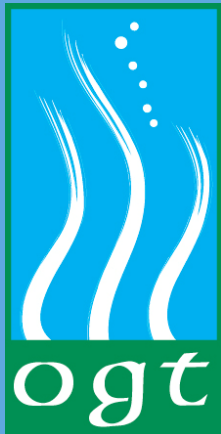
Cross sector capacity building



How a Biotech network / TCF can be useful?



THANK YOU !



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