Confidential Note[1]

Summary results of a Prefeasibility Study for a water transfer by a "Submarine River" from Tasmania to Victoria Australia[2]

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[1] English text is provided only as a "courtesy translation".
[2] Only the full Prefeasibility Study offers a complete presentation and readers can refer to it.

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RELIABILITY WARNING

The present Confidential Note is a summary of a free Prefeasibility Study that Via Marina has undertaken using its internal standard model for project evaluation. It only gives some preliminary and estimated technical or financial figures resulting from this standard model.

This Prefeasibility study is based on the estimated parameters indicated in the present Confidential Note. Only a real Preliminary Study of the project envisioned here could be based on actual parameters. Intakes actually possible at origin will have to adapt to the local environmental and political requirements. The quantities and delivery points have been arbitrarily taken to serve as a basis for the calculations of our Prefeasibility Study. They correspond to reasonable orders of magnitude compared to potential needs. It is clear that they will have to be readjusted upwards or downwards, destination by destination, in order to adapt them to an actual and creditworthy demand as well as to easily connect them to the local hydraulic infrastructures. Other destinations may be considered as well because along a coastal route any intermediate point can constitute an intake or delivery point. All other specific parameters of the envisioned project would have to be taken into consideration as well: e.g. seismicity, bathymetry, meteorological and oceanographical conditions, ...

Despite the care brought to the writing of the present document, Via Marina assumes no responsibility as for its accuracy or its exhaustiveness nor as for conclusions that could be derived: indeed, our standard model yields only very approximate first order of magnitude estimates which need to be validated by more in-depth studies. These estimates do not entail any kind of commitment whatsoever from our part: all data are merely indicative. Indeed, it is clear that no commitment whatsoever could be reasonably undertaken by any party before the results of numerous in-depth complementary studies are known.

The figures that we put forward (particularly the financial elements), although mere estimations, are not biased neither upwards nor downwards. Estimation errors could be in all likelihood positive as well as negative. If there does exist a potential for cost increases due to omissions, there exist as much a potential for cost reductions by optimizing some parameters that have been estimated conservatively. From our standpoint, these figures constitute the best and objective estimation for the potential costs with the limited means put into action for the present free Prefeasibility Study. It belongs to the reader to proceed in an independent manner to any analysis or verification that he would estimate relevant in order to base his opinion on the present document, in particular in order to decide whether it is worth continuing to investigate the projects envisioned in the present Confidential Note through a real Preliminary Study.

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1 EXECUTIVE SUMMARY

In order to complement its Tamar Valley Strategy (Tasmania), Tamar Lake Inc. envisions transporting some water from the Tamar River to Melbourne neighborhoods (Victoria State) across the Bass Strait.

Melbourne city and Victoria state could envision using this water in order to promote their social and economic development. Indeed, it could contribute significantly to fostering many different economic activities.

Our company Via Marina (a subsidiary of the Vinci Group, a worldwide leader in construction and concessions) has carried out a Prefeasibility Study that confirms the technical and economic viability of such water transfers based on our patented system Submariver® (or "Submarine River") for the transportation of fresh water in large quantities and over long distances by underwater flexible pipe. Our company specializes in the Study and Construction[3] of sizeable projects using our proprietary system.

Our "Submarine River" uses superficial water (e.g. the flow of rivers or other outfalls pouring into the sea) by pumping this water (in the example of rivers, at their mouth, which no longer hinders their downstream part). The transfer by an offshore route avoids all problems encountered in onshore routes (man-built or natural obstacles, level differences, expropriations ...). Submariver® is structured around a very flexible pipe that adapts to the seabed without preparation of the ground. It is simply laid on the seabed and is ballasted by a "mattress". Our "Submarine River" does not represent a technological leap. All its constituents have already been used on a large scale, but for other purposes. It is their combination that constitutes the true innovation of Submariver®.

With Submariver®, the transportation of bulk water up to 4,63m^{3}/s from Tasmania to Victoria could be very economical: about 0.45USD/ m^{3}. The laying itself could be conducted in only a few weeks after the initial study phase and the construction of the onshore works.

Therefore, the envisioned project Tasmania-Victoria Submarine River (or TVSR in short) could be seen by the highest political and administrative authorities of Tasmania as well as Victoria as a major development project worth being further studied through a Preliminary Study.

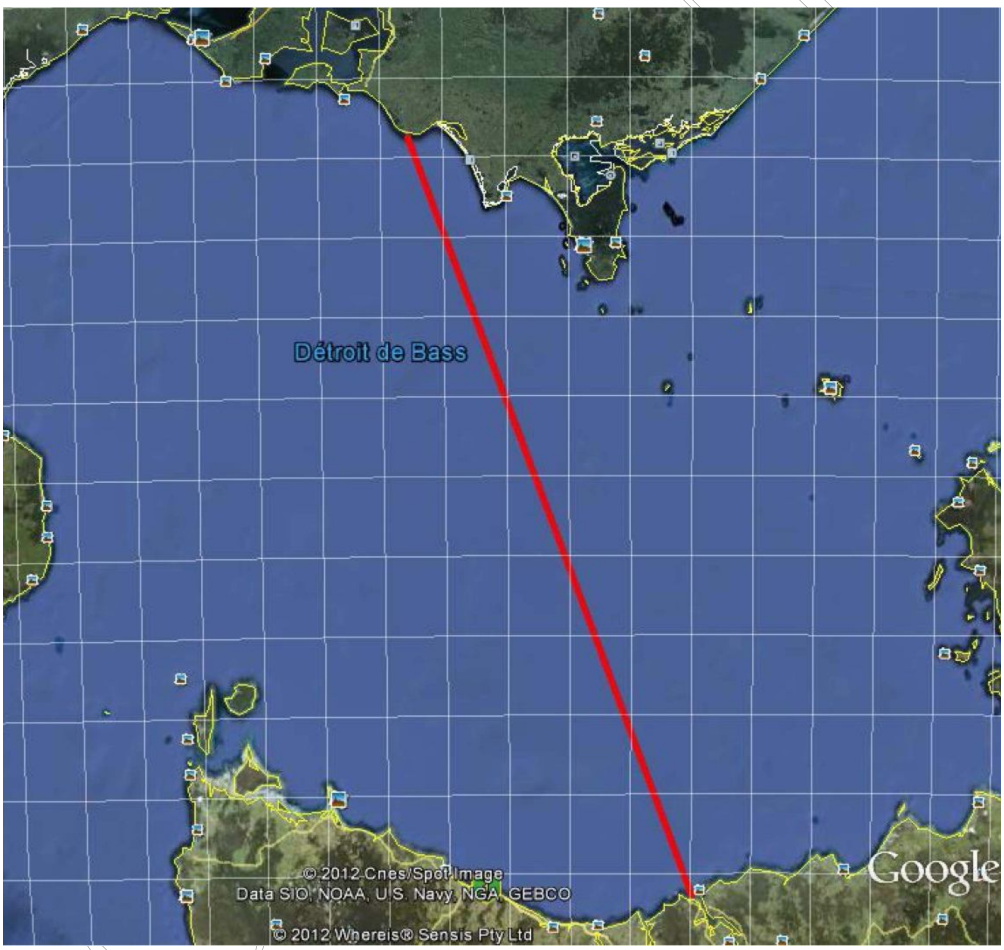
[3] As well as Operations (PPP, BOT, BOO, ...), if need be.

2 DESCRIPTION OF THE ENVISIONED SUBMARINE RIVER

2.1 Specific features of the Tasmania-Victoria Submarine River – TVSR

We have dimensioned TVSR for a regular flow all year round of 4,63m^3/s.

We have considered overall the following route as shown in the map here below.



Here below we give some details about this overall route.

2.1.1 Onshore Pipeline sections

The water intake point and the corresponding onshore works will be considered 25km inland, upstream the proposed dam location. A single concrete line of 3m diameter is considered.

The water delivery point with the related onshore works will be considered 1 km inland from the beach line, at an elevation of + 5 m above the high water mark. A single concrete line of 3m diameter is also considered. This delivery point will be chosen for the best connection with the onshore water network.

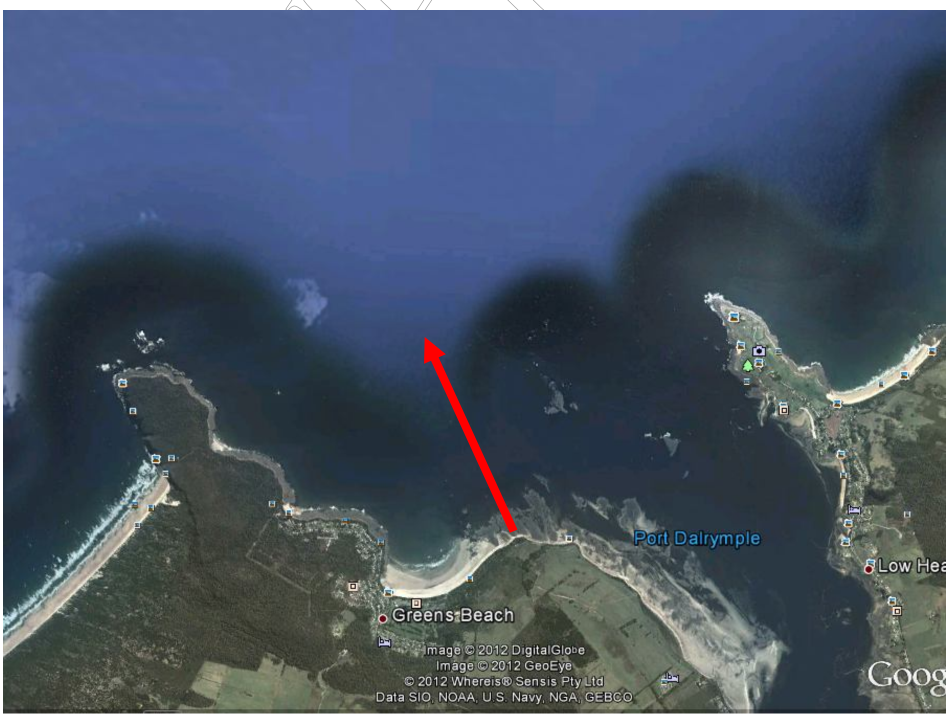
2.1.2 Shore approach selection

2.1.2.1 Departure from Tasmania

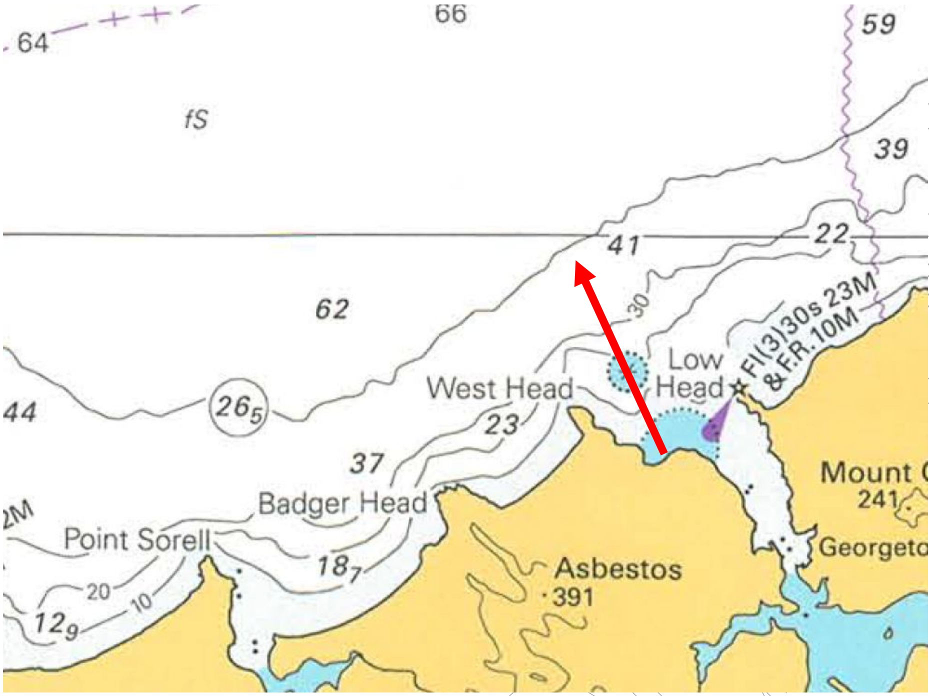
The water line departs north of the Tamar River near port Dalrymple. There is a long length of shallow water in that area and the shore approach is less favorable than East of Greens Beach. However, the soil appears to be silt and sand and trenching should be quite easy. The line will be trenched to -20m depth for hydrodynamic stability; beyond this contour and down to -60m depth, the line can be made stable using ballast weights.

A 2.5m diameter HDPE line is the recommended shore approach technique until the -60m contour were our proprietary flexible pipe (Flexipipe) line can be installed and stabilized by its own ballast; it is normally not economical to bring the Flexipipe line in less than about 60m. However, a more thorough study may consider the actual wave headings and provide some optimization.

<u>Departure Shore Approach</u> –Between Port Dalrymple and Greens Beach



distance shore to -20m contour: ca. 5 km; -20m to -60m contour: ca. 5 km



Bathymetric chart AUS 487 from UK hydrographic office, Jan 2005 – 1:500 000 scale – depths in meters

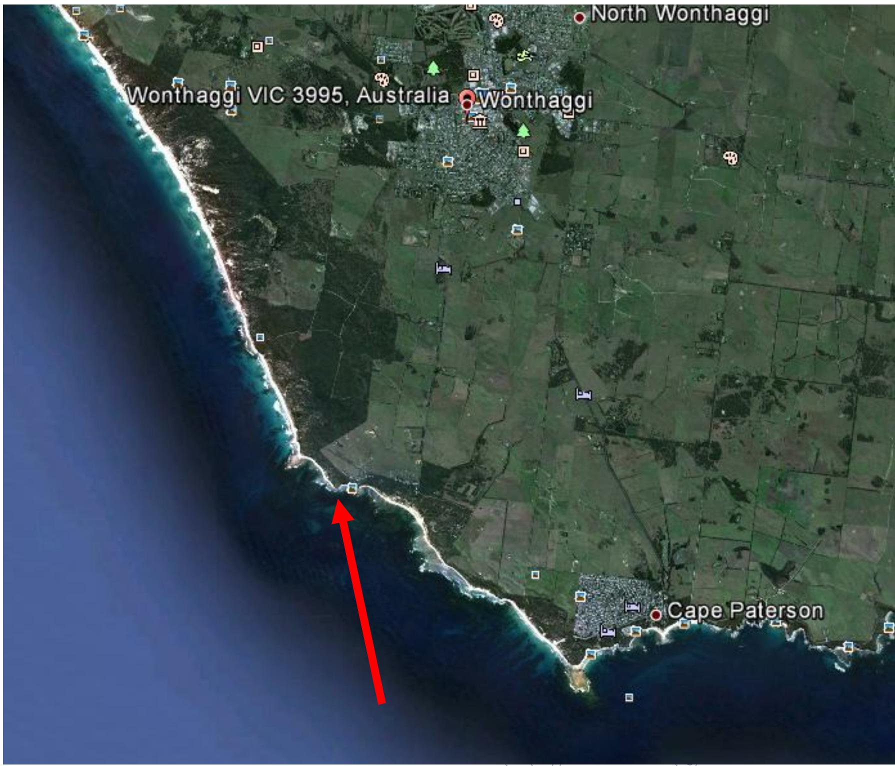
2.1.2.2 Arrival in Victoria

The arrival should be south of Cape Paterson as there is a gas pipeline landing south of Kilcunda that should be avoided if possible. This offshore pipeline has a heading of about 180° and should not be crossed. The water line should also avoid Cody bank shallow waters.

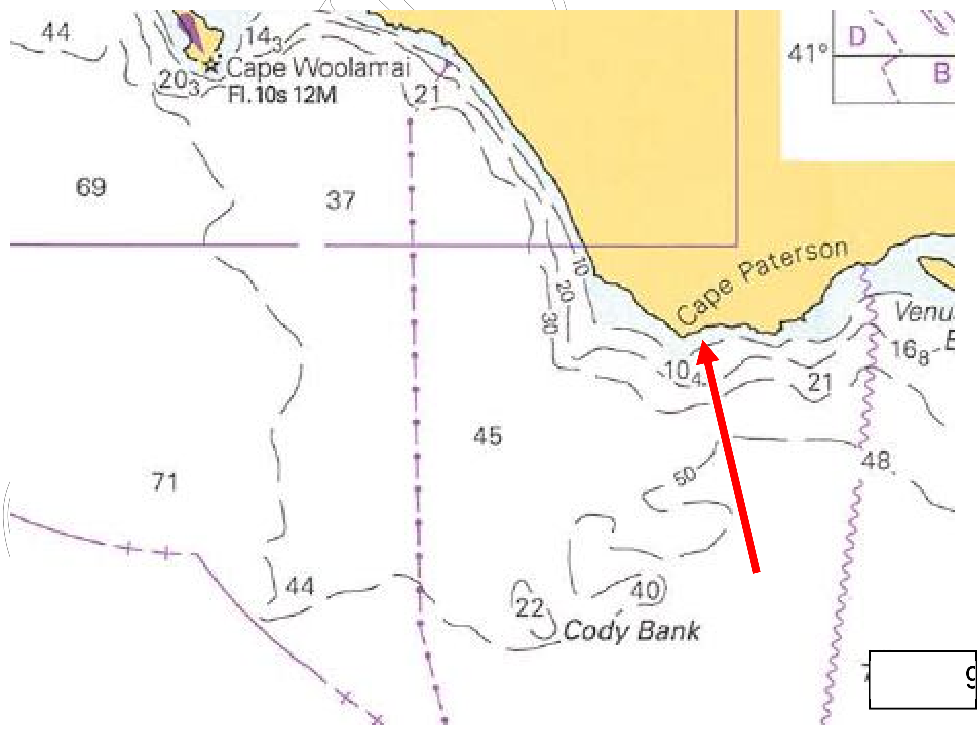
As the beach appears sandy, the line can easily be trenched by jetting until the -20m contour with a beach landing protected by sheet piles. Beyond the 20 m contour down to the 60m contour, the line can rest on the seabed and stability is provided by deadweights.

The same type of line, i.e. 2.5m diameter HDPE is considered for the arrival section as for the departure section.

Arrival Shore Approach –South of Cape Paterson & East of Cody Bank



distance shore to -20m contour: ca. 2 km; -20m to -60m contour: ca. 9 km



Bathymetric chart AUS 487 from UK hydrographic office, Jan 2005 – 1:500 000 scale – depths in meters

2.1.3 Flexipipe route

The main water transportation line with Flexipipe will run over about 285km in a North North Westerly direction.

The maximum depth along the envisioned route seems to be less than 100m (most probably less than 80m). This parameter will have to be checked through a detailed maritime survey.

The hydraulic analysis shows that, the optimized Flexipipe diameter is 3.5m for a Maximum Operating Pressure of 4.3 bars.

2.1.4 Economic synthesis

Let's remember that TVSR is dimensioned for a flow of 4,63m^3/s, i.e. equivalent to 2 or 3 large or very large desalination plants.

The laying itself could be conducted in about 2months. The onshore works could be constructed in about 2years.

The energy consumption of the envisioned project would be about 0,22kWh/m^3 which is less than 10% of the desalination consumption.

The overall CAPEX of the envisioned project would be about 1BN USD (including all studies required prior to the Final Investment Decision).

The final all-in cost per cubic meter would be about 0.45USD, which is less than half the price of desalination.

This all-in cost per cubic meter could be optimized further by taking advantage of the important economies of scale of our proprietary system: i.e. by transporting over the same distance a much larger flow.

In this project, about 75% of the total all-in price results from the amortization of the initial investment (engineering plus works) and the remainder of 25% stems from OPEX (desalination being rather about 1/3rd CAPEX and 2/3rd OPEX).

For calculating the total cost indicated above, we have amortized CAPEX over 20 years at 0%. Indeed, at this preliminary stage, we do not know yet the exact details of the project to be developed, how it is going to be developed (Public or Private or else through some kind of Public Private Partnership) and hence how it is going to be financed.

However, it is worth noting that amortizing the CAPEX of a project at 0% financing cost over 20yrs is financially equivalent to amortizing it: e.g.

- at 2% over 25yrs (approx.) or else
- at 3% over 30yrs (approx.) or else
- at 4% over 40yrs (approx.) or else
- at 4,426% over 50yrs (exactly)

These financing costs and these amortization durations seem reasonable for a long term infrastructure like the one envisioned here (this duration seems also conservative in light of an expected life of our system longer than 50years). In particular, this seems indeed very reasonable because these financing costs are real (and not nominal) financing costs as no inflation rate nor no foreign exchange rate variations have been considered in our calculations; depending on the currency being considered, these real financing rates are equivalent to nominal rates several percentage points higher (the level of inflation currently anticipated for the financing period being considered).

Finally, this cost estimate is based on current worldwide prices, valid for most regions. No “local factor” adjustment is made for TVSR specificities, in particular local labor. However, the portion of “local costs” in our estimate is limited.

2.2 Standard features of all projects using our proprietary system

The total delivery is equivalent to one or several large desalination plants.

The route would be determined in order to lay the pipe properly in relation with the nearby coast both at departure point and arrival point as well as along the coast. The pipe would also be laid at an appropriate depth. This depth and distance from the coast would have to be determined so that the pipe does not disturb human activities (tourism, fishing, maritime traffic, etc.) and conversely so that these human activities do not represent a threat to the pipe, with a view to minimize the total all-in transportation cost whilst taking into consideration all existing local constraints. Indeed, this delivery price results from a combination of depth and length (a slightly longer route may be preferable if it crosses less important depths). This should also be considered in determining the exact location of the intake and delivery points.

Our calculations are based on the flow indicated herein. Buffer reservoirs are not considered neither budgeted in the present prefeasibility study. However it is to be noted that aquifer recharge at destination could constitute an interesting solution towards that end. These buffer reservoirs would have to be dimensioned in order to ensure the required level of service at destination should the transport of water be interrupted for whatever reason.

Both onshore links (from intake point to the departure coastal points and from delivery points to the existing hydraulic installations or to be created) have been considered, both technically and economically, very superficially. Indeed, our system goes from a coastal point to another coastal point through an underwater route.

The laying itself of the pipes could be conducted in the time indicated here above after all the studies have been completed: indeed, our laying barges work at several km/day. Therefore the laying itself does not form part of the critical path of a project: rather the onshore works do.

In our financial calculations, the total investment includes all preliminary costs and studies (estimated very conservatively at about 5% of the material investment), all costs related to the mobilization and demobilization of the laying fleet as indicated here above, as well as the protection of the pipe over the appropriate number of kilometers as indicated here above in all shore approaches.

All onshore installations at departure and delivery points needed for our Submariver® e.g. the SCADA (Supervisory Control and Data Acquisition), the pumping stations, the installations against water hammers, the treatment plants, ... have been considered here.

Our project carries out the envisioned transfer with little energy expense, contrary to an alternative seawater desalination plant (hence better environmentally-wise; a point that also makes the indicated delivery price less dependent on the energy cost – this is particularly relevant to the originating regions when they are not energy rich).

Should a higher pressure be required for a delivery at some altitude at destination, the price of the pipe and the intake altitude would have to be adjusted accordingly. It is usually more economical, to pump at the coastal destination point for the remaining altitude and distance, rather than giving the total pressure at the departure point (because, in this latter case, the whole underwater route would have to be over dimensioned for this extra pressure).

A yearly provision for repairs has been included in the all-in cost (an important element to be checked in light of the naval equipment available on site for such purpose).

The envisioned water transfer could be priced at a very economical price per cubic meter transported underwater, which represents only a small fraction of the cost of seawater desalination. Thanks to this very inexpensive price, one can consider an agricultural use of the delivered water in order to irrigate all the regions around the destination points. It is worth noting that a large fraction of this all-in price comes from the amortization of the initial investment and therefore is fixed.

2.3 Benefits of all projects using our proprietary system

The proposed Submarine River is a uniquely ecological and economical solution to water and food issues at destination. Our "water highway" would supply water and would thus contribute significantly to fostering activities around the chosen destination points such as agriculture and tourism.

The envisioned project entails many and important benefits:

- Positive, structural and long term social impact on the beneficiary regions.
- Increased water availability per capita at a more satisfactory level in particular for human and urban consumption for a very long period of time.
- Strong economic growth linked to the stabilization and further development of existing activities as well as the creation of new and innovative activities in different sectors, particularly tourism and agriculture taking advantage of the locally strong and long sunshine, all together generating directly and indirectly Gross Domestic Product, Exports, fiscal revenues, employment, ...
- Recharge of aquifers today over exploited, thus reducing conflicts among water users.
- Contribution to diminishing saline intrusion in the coastal aquifers,
- No or little use of chemical products or waste.
- Simple technique, robust, without technological dependence, without sophisticated equipment at work and whose operation does not require an overqualified workforce, limiting thus maintenance and operating expenses.
- Provision of water in large quantities which could be supplied only by several large desalination plant.
- Little energy consumption, contrary to what would be required by desalination, thus less carbon footprint, less external dependence, and smaller volatility of water price.
- Fast implementation.
- Final all-in price significantly competitive compared to desalination which allows agricultural consumption beyond urban (human and industrial) uses.
- Very few and little downstream consequences.
- Inert object on the sea bottom will most probably turn into an ecologic niche
- Few interlocutors involved (mostly, the governmental authority in charge of territorial sea).
- Wide acceptance among civil society (NGOs).
- It would contribute to combating Climate Change impact,
- ...

Indirectly, such a project would also benefit inland users in the destination region as the needs of the coastal users would be served from another resource; hence, inland users could use more water without impairing coastal users' needs.

2.4 Potential alternatives are not satisfactory

Desalination of seawater could constitute another solution able to solve the hydric stress of the beneficiary regions. However, desalination has been applied until today only to relatively limited quantities: a large-size plant treats only 2m^3/s. This solution uses unfortunately a great quantity of energy (>3-4kWh/m^3) which constitutes a serious drawback in terms of carbon footprint within today's context of global warming and which makes its final price very dependent to the price of energy, upward oriented for the foreseeable future, especially important for countries scarce in domestic sources of energy. Desalination cost per cubic meter of fresh water is rather high (>1 AUD/m^3) if one actually takes into consideration all asides, which prevents its use for the largest usage which is agriculture. Beyond these quantitative aspects, it is also important to evaluate desalination in qualitative terms: disposal of brime and of other chemical products linked to this technique with their respective impact on the environment, purity of the water produced and its impact on the infrastructures as well as on the consumers, provision of energy, requirement of a faultless operation and maintenance with a highly qualified workforce, exclusive dependence from the membrane supplier, etc.

Instead of producing new fresh water, transporting water from an existing resource of fresh water could constitute another alternative for solving the issue at stake.

Indeed, why produce new fresh water when you can "transport" existing water to where it is needed? To feed the increasing population in the beneficiary regions, why import "virtual" water through food imports when you can expand locally the food production by cultivating new areas through new irrigation perimeters ("green the desert" or "turn the desert into orchards")?

As all water resources at the envisioned destination are already over-exploited, one cannot envision supplying it with a traditional onshore transfer.

Indeed, one could envision implementing some water transfer with a traditional onshore link but it would be much more difficult and costly without any doubt. Also there would be a high ecological impact as an onshore transfer encounters along its way many problems (natural or man-made obstacles, altitude variations, expropriations, etc.).

Maritime routes using traditional solutions would be disregarded in all likelihood as they are neither technically nor environmentally nor economically able to solve the issue at stake in the context of the local constraints.

Water conveyance by marine vessels could be used but is rather expensive (more than twice the price of desalination) and suffers also from many other disadvantages, particularly in terms of quantities: a daily rotation of a 100.000 metric tons tanker would provide only slightly more than 1m^3/s.

Our Prefeasibility Study proves today for the first time that the envisioned project can be considered with a maritime route thanks to our exclusive technique of “Submarine River” Submariver®. Thus, the present Confidential Note proposes to all political and administrative authorities in the intake and beneficiary regions a solution for the supply of large quantities of fresh water over the long term and this solution is at the same time technically viable and economically profitable. We present it only in order to initiate among said interested bodies a thought process based on the demonstration brought here of the competitiveness of our system Submariver®.

Obviously, in such a project the traditional offer and demand dilemma applies. Should one adapt the offer to the demand extrapolated from the current situation with a conservative trend? Or could one imagine a larger demand that would easily emerge if sufficient offer was available? What could the destination points envision in terms of social and economic development: urban, tourism, agricultural, ... if more water was available?

It is within this more dynamic context that the flows and the delivery points to be considered should be determined, thus fostering there the largest possible social and economic development.

It is important to note that our system benefits from important economies of scale in relation with the flow transported. Thus, the larger a project is, the more interesting it is.

In this context, interested authorities could envision with attention a planning process in order to determine the potential demand for water. That way, they would contribute to improving the envisioned project, generating the maximum positive externalities with the minimum price for the transported water.

3 GENERALITIES ON OUR SYSTEM

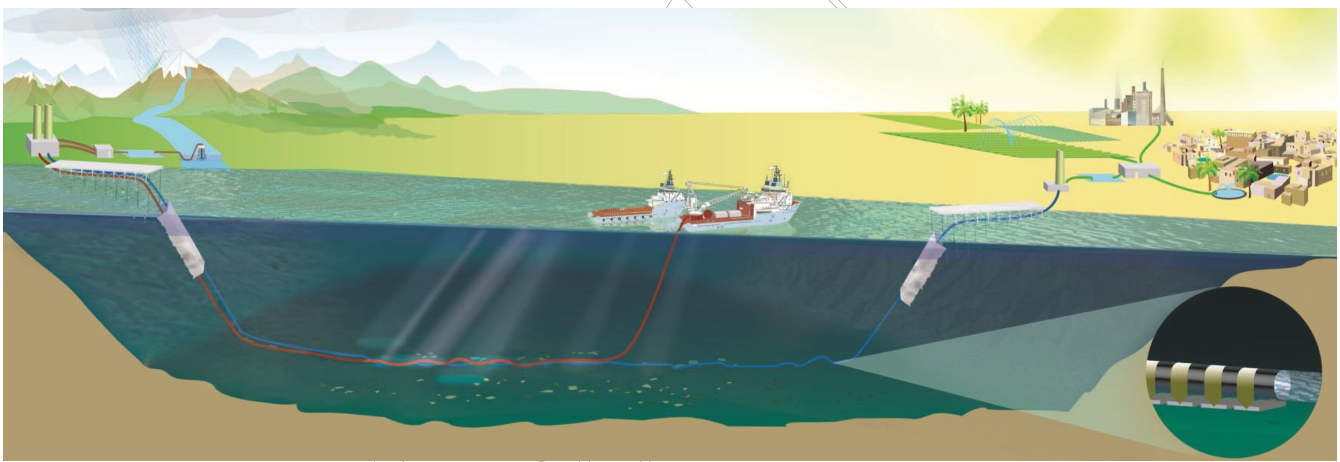
3.1 Technical aspects of our system

3.1.1 Overview of our system

Via Marina wishes to contribute to reducing inequalities between regions rich in water and those suffering from water shortages. To do that, Via Marina has developed its proprietary system for transporting water in large quantities and over long distances by underwater flexible pipe. This system of submarine rivers is called Submariver®.

Our “Submarine River” does not represent a technological leap. All its constituents have already been used on a large scale, but for other purposes. It is their combination and their adaptation to this context that constitutes the true innovation of Submariver®.

The following sketch illustrates this patented system which applies to coastal regions. This illustration refers to a catchment of fresh water at the mouth of a river. Another potential application is described later on: reuse of treated wastewater



In many places in the world, coastal regions suffer from a shortage of water. However, rivers in other regions pour large quantities of fresh water into the sea. The idea is to take water at the mouth of these rivers. The water removed in this way is transported via a submarine pipe. On arrival, homes, agriculture and industry benefit from the water delivered. This gives rise to a strong economic and social development in these coastal regions.

Water is removed at the mouth of a river, just upstream from its salt wedge. Only a small fraction of the residual flow is taken at that point, in order to limit the impact downstream on the ecosystems of the river mouth.

A small dam diverts the water to be transported. A pipe or land canal brings the water to the coast. On its way, the water undergoes a slight treatment to avoid it transporting suspended solids or micro-organisms that could damage the Submariver pipe. The water is then pumped at the pressure required for the distance to be covered. Anti-water hammer devices ensure the safety of the system.

In the departure shore approach, some works protect the pipe until a certain depth and a certain distance are reached. These depths and distances are calculated so that the pipe does not obstruct surrounding human activities and so that such activities do not threaten the pipe. Fishing, leisure activities, maritime traffic and other elements are to be taken into account. Indeed, in the shore approaches, our system will constitute an important fish aggregation device (FAD).

The pipe is then simply laid on the sea-bed without any kind of preparation of the ground. When possible, it is placed on the continental shelf at a depth of about 100 meters. However, there is no technical limit to the depths the pipe can travel over. The cost is higher when the depth is greater.

On arrival, the same systems protecting the pipe at departure point are present, at the depths and distances required locally. Also present are the anti-water hammer devices and the intermediary storage tanks from which the connections to the different distribution networks are made. The water thus delivered can be used directly for agricultural purposes. For domestic or industrial uses, fresh water taken at the mouth of a river has to undergo the usual treatments.

3.1.2 The laying

The pipe is laid with its ballast from a laying barge. This barge is fed as it progresses by supply boats, which work in relays to and from a nearby port. The laying barge goes forward at a speed of about several kilometers per day. This ensures the submarine route is rapidly undertaken once all engineering studies and the building of the onshore works have been completed.

The laying time of a long project (i.e. consisting in several successive stages) can be shortened or lengthened by using more or less laying barges: one can work on several stages simultaneously or consecutively. This allows the construction to adapt to external factors such as: erection of onshore works or the financing of the project or the progressive emergence of a creditworthy demand at the destination points, etc.

3.1.3 The pipe

The diameter of the pipe can be as large as 4m.

The pipe is very light and totally flexible. It can collapse and then swell up again.

The pipe is made mainly of very highly resistant thermoplastic textile fibers. The fibers are covered with a special coating on the inside to ensure the pipe is waterproof, and on the outside to protect it from the aggressive marine environment. The materials used in the pipe comply with all regulations on food contact materials.

All the pipes are engineered to resist to a pressure equal to three times the normal operating pressure which is generally less than 5 bars. We consider, at this preliminary stage, that water hammers or other hydrodynamic factors, internal or external (tsunamis, …) are sufficiently covered by this security factor, in view of the peculiar characteristics of our pipe. If one would accept to lower this security factor, at least temporarily, the pipes could in fact transport a larger flow for the same investment.

The pipes are manufactured by segments of several hundred meters (up to 2000m depending on the diameter and the thickness of the pipe). These segments are wound flat around drums and are transported in this way by the supply boats to the laying barge where they are welded. Today, these techniques are perfectly mastered by the oil and gas industry.

3.1.4 The ballast

Since fresh water is being transported amid salt water, the pipe has a natural buoyancy. It therefore has to be ballasted. The ballast also serves as an anchor against marine currents and swell, even if these constraints are alleviated by depth.

The pipe is linked with straps to clump weights used as ballast. The length of the straps is calculated so that the pipe floats at a certain stand-off distance from the sea floor (usually about one diameter). Thus, Submariver can easily adapt to the contours of the sea bed.

The characteristics of our pipe make it possible to cross underwater canyons with only some supplementary technical difficulties and added costs (pending the results of real tests). The same applies to the crossing of fault lines, to the impact of earthquakes or to the required adjustments to the ballast (probably anchored into the sea bottom) in some special points, like bends along the route. Likewise “scour” and soil liquefaction should have only a limited impact on the ballast.

The combined impact of all these special elements on the overall financial parameters of the envisioned projects should be of a second order of magnitude and would have to be studied at a later stage during more advanced engineering studies.

For the impact of the marine environment on our pipe laid on the sea bottom at about 100m depth, our standard model of project evaluation considers the following methods and parameters: third order Stokes equations and Morison & O’Brien formula, DnV Recommended Practice E 305 for "On Bottom Stability Design of Submarine Pipelines". For the currents on the sea bottom, our model considers a speed of 0.51m/s. We take a transverse slope of 5% gradient all along the route. We consider waves on the sea surface with the following characteristics: height 8m, period 12s, wavelength 225m.

At this stage, and for a standard model of project evaluation, all these parameters seem appropriate. Differences that may exist between these generic values and the real data of a specific project would not radically affect, in the vast majority of cases, the technical and financial orders of magnitude expressed in the present Confidential Note.

3.1.5 Miscellaneous

If the transport distance is very long, it is preferable to bring the pipe up to shore approximately every 100 or 200 kilometers in order to provide again the required pressure into the pipe. These intermediary stages can constitute additional water catchments, or else extra delivery points. It is thus possible to cover more than 2000 kilometers economically.

Whenever several parallel pipes are required in order to transport very large flows, they are situated at a good distance from each other to minimize the risk of an accident taking place simultaneously.

Submariver can therefore transport several dozens of cubic meters per second while using up very little energy.

If larger flows could prove necessary in the future, it is generally more economical to slightly underutilize a pipe over dimensioned during some period rather than laying a new pipe some time after the first installation. Typically, a growth potential of 50% implies an over cost during the period of underutilization of about 15-20%. If the flow to be delivered is not evenly spread over the year, such a possibility would have to be considered in order to cope with seasonal peaks.

Our system does not represent any threat to any form of civil maritime activity nor to the circulation of military submarines (no more than any large rock on the sea floor). It does not infringe any international treaties related to the sea: for instance, the Montego Bay Convention. Its vulnerability to terrorist attacks is also rather limited. More generally, and always pending the results of more detailed studies, our system does not appear to infringe any of the international conventions regarding the marine environment.

3.1.6 Another potential application of our system

Submariver could be used to transport farther away treated waste water stemming out of the outfalls of sewage treatment plants of coastal cities in order to reuse it for agricultural or industrial purposes instead of pouring this (un)treated water into the sea. Projects of this kind could also be used for agriculture or for recharge of water tables.

That’s supposing there is no local reuse demand and transportation over a long distance is required to meet a creditworthy demand somewhere else close to the coast.

These projects should be considered cautiously in light of the real post treatment quality of the water to be transported: i.e. in most cases the sewage treatment plant would have to be upgraded in order to meet the required international standards (WHO, FAO, ...).

Our system could positively contribute to solving the issue of sea water pollution: indeed, one could now obtain an economic and social return by treating waste water and thus diminishing substantially the sewage flows disposed of into the sea.

Our system would allow turning the ecological constraint into a productive investment and at the same time alleviating the price of water for the first users upstream.

3.2 Environmental aspects of our system

It is important to note that our "Submarine River" does not seem to have any negative environmental impact. At the relatively important depth that we consider, marine life is rather limited. Consequently, the potentially negative impact of our pipe on the fauna and the flora of the underwater floor will be, in all likelihood, very limited (pending the results of real tests).

However, in order to validate the social acceptance of our system, Via Marina has met with many experts or NGOs specialized in the water sector or sustainable development in France and globally. The environmental aspects of Submariver® have been positively considered, in particular by the following:

3.2.1 Written expressions

- World Water Forum, Istanbul, March 2009, conclusion of the report from session 3.2.1.: Ensuring Adequate Water Resources Development and Management (Quantity and Quality) for Sustainable Development and Storage Infrastructure to Meet Agricultural, Energy and Urban Needs: "The water supply from the sea by flexible pipes should be an easy, economical and environmental friendly alternative solution. Inter Basin Water Transfers in order to transport water from "excess" basins to "in-need" basins should be positively albeit carefully considered, in particular using innovative submarine rivers or subsea aqueducts."
- Ghislain de Marsily, of the French Science Academy, in his book "L'Eau, un trésor en partage", Dunod, Paris, 2009, P.233, "Perhaps, the most original idea for the transportation of water comes from a small French company, Via Marina, that proposes … The size of the envisioned catchment would not represent a constraint too important for the downstream part of the river and its ecosystems. … It is indeed a technology which allows the development of a new fresh water resource, with no impact on the environment."

3.2.2 International organizations

- UNESCO, Prof. Dr. Shahbaz Khan, Chief Sustainable Water Resources Development and Management Section
- World Water Council, Loïc Fauchon, present Chairman as well as William Cosgrove, past Chairman
- Mediterranean Institute of Water, Hachmi Kennou, General Manager

- Global Water Partnership, Ivan Chéret (Member of the Camdessus Mission of UNO on Water and "father" of the French 1964 law on water)

3.2.3 Non-Governmental Organizations

- International Secretariat for Water, Montréal, Canada, Raymond Jost, General Secretary
- pS-Eau, Pierre-Marie Grondin, Manager
- Coordination Sud, Henri Rouillé d'Orfeuil, Chairman

3.2.4 "GreenTech" Investment

- Particularly thanks to its environment friendly characteristics, Submariver has been a laureate of the Tremplin Entreprise competition (co-organized by the French Senate and the Parisian business school ESSEC, and which panel of judges is mainly composed of venture capital financial investors

3.2.5 Qualified experts

- Brice Lalonde, former French Environment Minister
- Pascal Berteaud, Former Water Director in France
- Bernard Barraqué, Research Director at French CNRS, water specialist
- Henri Boyé, Engineer General, French Council for Environment and Sustainable Development
- François Molle, Research Director, Policies and management of water resources, French Institute of Research for Development

All these experts or institutions agree that the environmental impact of our Submariver® system on the ecosystems of the river mouth should be rather limited in view of the low catchments that are envisioned (some percentage points, indeed much less than the natural seasonal or year-to-year variations of the flow of the considered rivers), as suggested by the afore mentioned quotation of Mr. de Marsily.

However, as precautionary steps, these experts or institutions insist that the necessity of the envisioned water transfer should be clearly established, and that it would be impossible to satisfy the related demand through a proper management of the local resource.

Submariver does constitute a solution that is respectful of the sustainable development and of the environment, particularly thanks to its very low energy consumption (even in the most unfavorable cases, much smaller than 1kWh/m^3), with no waste and with a very limited use of chemical products (physical and chemical treatment of the transported water at the entrance of our pipe).

3.3 Legal aspects related to the implementation of our system

Our system can only be implemented in a legal framework that would have to specify the following items in connection with the transported water:

- Quality
- Quantity, potentially with seasonal variations if they cannot be avoided
- Service rate (acceptable number of consecutive days without delivery)
- Royalty or any other compensation system for the authorities in charge of water at the departure point
- Long term (25, 50, 99, ... years) supply commitment by these same authorities
- Take or pay or equivalent water purchase agreement from the users at arrival point for the same long term duration
- Legal points for the offshore and onshore route and works
- Governance of the infrastructure once in operations
- Other fiscal and legal aspects of the envisioned transaction

In all likelihood, Via Marina will not be part to this legal arrangement, but we will have to execute it (directly or indirectly). Indeed, Via Marina is mostly a "carrier" that transports from a point A to a point B water previously "purchased" (for lack of a better word) by B to A; as such Via Marina is compensated for its service of transportation, either by A or by B, either during the construction phase of the project and/or during its operations phase.

Alternatively, Via Marina could act (directly or indirectly) within a different framework in terms and conditions to be mutually agreed: e.g. a variant of some sort of a PPP, DBOT or equivalent, ...; in some of these cases, we could then act as "sellers" (again for lack of a better word) to B of the water previously "purchased" from A.

APPENDIX 1
OBJECTIVE
OF THE PRESENT CONFIDENTIAL NOTE

The project envisioned here, as any innovative initiative, of high importance and complex structure, does not require at this stage assuming any specific commitment nor obligation by any party, except being known by interested authorities and obtaining from these an expression of their in principle interest and of their willingness to participate in its implementation. Its ultimate construction will be the fruit of an iterative process which will follow the traditional sequence: studies, solution to issues, elaboration of proposals, decision taking and related implementation, in all the fields that would have to be covered in order to exhaustively treat the envisioned project (political, social, legal, technical, ecological, economic ...). In such a process, all administrative and political authorities involved will have at every moment the possibility to intervene in the corresponding manner.

The political and administrative authorities to which the present Confidential Note is addressed, should have an in principle interest in considering a project that would transfer water in conditions such as the envisioned project and on the implementation of further studies. Consequently, it would seem appropriate to organize a meeting between the management of Via Marina and these administrative and political authorities having a direct or indirect interest in such a project in order to evaluate the opportunity to start the sequence of studies traditional of all types of major infrastructure project: Conceptual Design, Detailed Design, Engineering Study or Front End Engineering and Design (FEED) leading directly to the construction phase, by launching first a Preliminary Study of the project envisioned here in terms and conditions to be mutually agreed and after the required financing has been secured from sources to be mutually agreed as well. Other organizations like Chambers of Commerce, Industry and Tourism, farmers or fishermen associations ... could be consulted as well.

All the afore mentioned in-depth studies would spread over some years. When these studies confirm the presently estimated excellent technical viability and economic profitability, the project envisioned here (or others better suited) can be constructed after the signature of the required agreements. Obviously, these further studies would be based on parameters more precise than the estimates used for the present Confidential Note.

When this project comes to fruition, fresh water will be delivered to the envisioned destination thus contributing to the economic and social development of the related area.

APPENDIX 2
OVERALL CONTEXT

Some regions suffer from hydric stress, which hinders their development. However, other regions benefit from abundant water resources and their rivers pour into the sea large quantities of fresh water. Transferring water from one region to the other with our Submariver® would greatly accelerate the development of regions in deficit.

Indeed, very generally speaking, instead of transporting water along a route parallel to a coast with traditional onshore techniques at some distance inside the country, it is usually better to use our Submariver® laid offshore at some distance from the coast. Thus, our system is an alternative and/or a complement to many projects that have already been studied and it can also be considered in other cases that have not yet been studied. Our "Submarine River" could apply anywhere in the world for the benefit of coastal regions where about 60% of the world population leaves.

In order to bring a satisfactory solution to all these situations, Via Marina has already registered many patents (and others are pending) on which our proprietary system Submariver® is based.

Via Marina has identified and established contacts for more than three dozens of projects very different all over the world and to which Submariver® could ideally apply: regional, national or international; flows (from several m^3/s to several dozens); distances (from a few hundreds of kilometers to over one thousand); depths (from less than 100m to more than 2000m); ...

We have finalized a first Preliminary Study for an important project in France as well for another one in Chile for which further detailed studies should start soon. We are currently working on other preliminary studies. What a better proof of the market acceptance of our system by the market?

The Chilean project could transport $30m^3/s$ or much more over as much as 2400km. See publications posted on our website.

The general technical principle of our system, including the pipe and its "mattress", its laying, all the ground installations (pumping, SCADA, anti water hammer ...), etc. have been studied and quantified. The potential problems, like degassing, pipe rupture, etc. have all found their solution in our Prefeasibility Study. A prototype will be tested soon in a laboratory.

We have selected a group of companies (beyond the companies of the Vinci Group, our majority shareholder) which will constitute the consortium that will implement the construction of the projects that will use our system. This consortium could be adapted for each project depending on its local characteristics. In due time, i.e. at each stage of a project (studies, construction, operations), Via Marina will introduce to the interested parties the structure with the adequate financial strength in order to take on the related contractual commitments.

Via Marina benefits now from all the support of its majority shareholder, the Vinci Group, in all areas: technical, commercial, financial, human, etc.

In summary, we have built a solid base from which we can move on to the next stage of the development of Via Marina: the construction of a first project.