

# The Terra

Interview with Bernard by Tesa  
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**T: So, let's start at the beginning... What is the Terra?**

B: The Terra is a systemic solution to the conflict between corporate short-term priorities and the long-term needs of society, so that the vast capacities of global corporations can be harnessed towards sustainability without relying only on regulations and moral pressure. It is a currency that is specifically designed to support the emergence of a more stable, equitable, and sustainable world economy. It does that by eliminating or minimizing currency-induced fluctuations in global trade and neutralizing inflation (stability effect), and by creating strong incentives for corporations to adopt a long-term perspective for their investment decisions (sustainability effect). Right now, our current monetary system produces the exact opposite effects: instability, concentration of power, and destruction of our environment through short-sighted investment decisions.

To people like you, I would say that the Terra is a bridge currency to support the energetic rebalancing of our global monetary system, so as to restore power to the Great Mother. Terra means earth in Latin. The Terra is designed to calm excess yang and activate the yin. It is designed to help hospice the old monetary system, cushion its most negative effects, and help us transition to a new types of currency systems which are still in very early stages of development and need a great deal more time to strengthen. The world that becomes possible once we release the monopoly of conventional money requires both the Terra and the local social purpose currencies. But they both need to grow to a level currently unthinkable to be able to replace current currencies.

**T: And if I were to ask you for the grey suit definition of the Terra?**

B: I would say that the Trade Reference Currency (TRC) -- which is the Terra's formal name -- is a complementary, privately issued, supra-national trade reference currency backed by an inflation-resistant standardized basket of the dozen most important commodities and services traded in the global market (including oil, wheat, copper, and some standardizable services).

**T: Could you please go over the Terra's most important and significant characteristics? I'm asking for the "Terra for Dummies" version please!**

Ok, there are four main characteristics to the Terra:

- ❖ First, the Terra is a *commodity basket currency*. In the same way that the dollar once used to be backed by gold (before the 1920s), the Terra would be backed by

a standardized basket of the most important commodities (as well as some standardizable services) traded in the global market (oil, wheat etc.). The Terra backing would consist not of one single commodity, however, but a dozen of the main international commodities, including gold. Being backed by a physical inventory of commodities would make the Terra a secure, very robust, and stable mechanism for international contractual and payment purposes. I can explain why that is later.

- ❖ Second, it is a *demurrage-charged currency*. This means that the Terra carries a negative interest rate. Unlike our national currencies which carry a positive interest rate and earn us money when we hold on to them, the Terra's demurrage charge works in the opposite way: it acts like a parking fee, incurring a cost over time to its holder (estimated at 3.5%-4% per annum). The charge insures the currency's use mainly as a planning, contractual and trading device, primarily designed to remain in circulation, not to be hoarded.
- ❖ Third, it is *privately* issued. The Terra will be issued by a non- governmental initiative with an organizational structure that is open to all newcomers meeting certain pre- established criteria (organizationally similar to that of the Visa credit card system). The alliance will issue Terras as inventory receipts for the value of the commodities sold to the Terra Alliance by producers of those commodities that are components of the Terra Basket.
- ❖ And last, it is a *supra-national complementary* currency which means that it can be used globally but is not intended to replace official currencies, a very reassuring feature for many economic actors who are very invested in the current system! The Terra is meant to operate in parallel with national currencies, and to be an option that is available for economic actors who voluntarily choose to use it. Note that the Terra is primarily intended to be used by corporations engaged in global trade, not by regular folks like you and me. We will not be buying our baguettes with Terras!

**T: Can you explain in greater details the significance and effects of these 4 characteristics? What is the advantage of the commodity basket backing, for instance?**

B: In a nutshell, it would put an end to the extraordinary volatility of our current monetary system, radically decrease the risks of the types of foreign exchange crises that have affected no less than 130 countries over the past past 25 years, including Mexico, Russia and Argentina. It would create the conditions necessary to stabilize global trade.

Let me say a few words about the shortcomings our current system. Over \$1.3 trillion is traded per day in foreign exchange markets, a figure that is 100-fold the trading volume of all of the world's stock exchanges combined. Nearly 96% of these transactions are purely speculative; they do not relate to the "real" economy; they do not reflect global movements of exchanges of actual goods and services. Functioning mostly as a

speculative market, current national currencies can be undermined not only by tangible economic news but also by mere rumor or changes in perception as well. This growing instability has been brought about by 3 main changes in our currency systems of the past 3 decades: the introduction of floating exchanges in 1971, the financial deregulations from the Reagan and Thatcher Era, and the computerization of foreign exchange. You can read more about this in my white paper about the Terra ([www.terratrc.org](http://www.terratrc.org)), but the important thing to understand here is that with floating exchanges, financial deregulation and a 24/7 global financial market, it is now possible for a currency to lose much or event much of its value in a matter of hours, and this has already happened many times.

The introduction of the Terra would radically diminish instability in two ways:

- ❖ The Terra would introduce a universal and stable standard of value. Since it is fully backed by a physical inventory of not one, but a dozen or so of the world's most important commodities the Terra would be a very robust payment unit that offsets volatility and currency risks. This robust standard of value-benefits commerce in a number of ways. It lowers costs by reducing the need for expensive hedging countermeasures, and it offers a dependable, cost effective reference mechanism for global trade.
- ❖ The commodity basket backing would also make the Terra inflation-resistant. Inflation is always defined as “the changes in value of a standardized basket of goods and services.” By definition this and also explain the various practical positive impacts of an inflation-resistant currency.

### **T: How about the fact that the Terra is a demurrage currency?**

In a nutshell, the demurrage function of the Terra makes long-term thinking profitable, and therefore, long-term sustainability much more likely.

It would provide a safety net in support of the conventional money system and aims at mobilizing the vast energies of global corporations towards a sustainable future for all. This is most effectively accomplished not by regulation/legislative imperatives or moral indignation, but rather by providing a strong financial incentive in the right direction. Without going into the technical details, I'd like to say that currencies with positive interest rates encourage short-term thinking, and that those with negative interest rates do just the opposite. It's not an accident that demurrage was the type of currency in place in Egypt and the Middle Ages... that's what it took to invest in pyramids and cathedrals which take a very long time to build.

The demurrage feature of the Terra would provide a systematic financial motivation that realigns financial interests with long-term concerns. This is in direct contrast with what happens today with conventional national currencies. The discounted cash flow of conventional national currencies with positive interest rates systematically emphasizes

the immediate future at the expense of the long-term. The same discounted cash flow with a demurrage charged currency produces the exact opposite effects.

**Grant:** I understand how demurrage promotes a long time horizon but I don't get how an international trade reference currency can affect a corporation's time horizon if the corporation's bottom line is not expressed in Terras and continues to be expressed in national debt based currencies. As long as quarterly earnings are not expressed in Terras, how are CEOs incentives are changed at all?

**B:** There are different answers to this question that can be regrouped in 3 stages of application of the Terra. Once the Terra exists as an operational standard, it can be used immediately as a voluntary internal standard by any company; then later as a voluntary reporting tool, and finally as an institutional reporting standard.

Short term, what really matters is that the Terra is used internally for planning and global allocation of resources. Does it make sense for IBM to use US\$ as its planning and allocation currency when only 30% of IBM's business is in US\$? Or for BP to plan in Pounds when only 5% of its business originates in that currency? Some companies (McKinsey) have actually had to develop their own internal currency for measuring the contributions of the different partners to the overall business. For the outside world McKinsey uses US\$ and Pounds and Euros, but for internal planning purposes they use that internal currency. The only difference is of course that the currency they developed and use doesn't have demurrage or the other systemic positive features of the Terra. Therefore, even if the "outside reporting" of a company continues as today in national money, it does make sense to do planning and allocation in Terras. Once planning and allocation is done with Terras, the long-term thinking effect is already kicking in. Furthermore, just like today some companies claim kudos for being "green" if, for instance, they generate their own renewable energy, I don't see why it couldn't become a way of signaling that a company is being "more green" by "using Terra for planning".

The second stage would be for a company to report to its shareholders in two sets of currencies: whatever they use as national currency for reporting purposes, and a "green report" in Terras. Shareholders would then have the choice to understand the strategies of the company both ways.

The final and third stage is the most ambitious one: to have the accounting associations accept the Terra standard as an optional currency for reporting to shareholders, for example for "any company operating in countries with more than 5 different national currencies". This can realistically begin to happen only after the Terra has been successfully used for a number of years on a voluntary internal basis, as described in the earlier phases. However, it is important to understand that a company can voluntarily use the Terra from the beginning as an internal planning tool, and its effects would be operational from the beginning as well.

**Tesa:** You have explained the significance of both the commodity basket backing

**and the demurrage function. Can you talk about the significance of the other two features of the Terra, that it is private issued, and is a supranational but complementary currency?**

I recommend checking out my white paper for answers to these questions ([www.terrairc.org](http://www.terrairc.org)),

**Tesa: who stands to gain from the Terra?**

**Bernard:** Well, actually virtually everyone stands to gain from it: humanity as a whole, corporations, banks and individuals, less developed countries as well as developed countries.

**Tesa: Ok, let's start with humanity as a whole!**

**Bernard:** Well, it's pretty straightforward. As long as big business is focused on short-term profits, chances are minimal that any long-term sustainability will be possible. The Terra's demurrage feature will shift corporations' time horizons, increasing the likelihood that business will start acting in a way that support rather than undermine the shifts that a growing number of us see as necessary.

**Tesa: How about Business?**

**Bernard:** The Terra benefits multinational corporations in at least 3 ways.

First, it makes available a robust international standard of value, with a consistent value in real terms for international contracts. No party would lose out because of monetary instability or currency fluctuations.

Second, it makes it possible for them to convert inventories of illiquid assets, such as major raw materials, into liquid ones. Currently, in the corporations the inventories of the components of the basket are a cost item. The oil companies for instance are paying for the cost of storing oil... a cost which they pass along to their customers. With the Terra, inventory becomes a liquid source of capital. This is a significant advantage because over time, such storage costs can become substantial.

Third, it provides working capital at a lower cost than with conventional national currencies as the demurrage fees only kick in for a particular user if the Terras are not spent.

**Grant: would not these advantages be limited to folks who hold the commodities in the currency basket?**

No, the first advantage listed is relevant for any "user" of the Terra, even if they don't hold some of the components of the basket. The second advantage – the use of inventory

as a source of liquid capital – is the one that is available only to “backers”, i.e. companies that produce or own some components of the basket.

**Grant: How about the third advantage? I don't understand how the Terra can provide working capital at a lower cost if you can't use the Terra to pay your employees, and they can't use it to pay their rent.**

**Bernard:** Indeed, the purpose of the Terra isn't to pay employees. However, whenever a company is paying in Terras one of its suppliers, it reduces its needs of working capital in conventional money.

The costs of training people, for example, are considerable (only to then fire them afterwards). Expenses incurred in plant and equipment over-investments or under-investments are also considerable. And, it is well known that political instabilities often occur during, and result from, economic downturns. Such instability is not contributing to a healthy climate for businesses either. The Terra counteracts such downturns.

The Terra lowers the cost of doing business, by reducing the need for expensive currency hedging counter-measures and providing a dependable, low-cost insurance against uncertainties deriving from international currency markets. It offers a dependable, more cost-effective reference mechanism than conventional corporate barter. It enables greater opportunities by which to conduct global commerce, including investing in developing countries, by providing a stable international currency.

**Grant...** I don't get the investment in 1/3<sup>rd</sup> world piece. Is not an investment something which you hold over time... while the demurrage is a disincentive to hold anything over time?

**Bernard:** Here I am referring to the result of the overall stabilization effect of the Terra on the global system. We know that floating exchanges has significantly reduced investments in a number of developing countries, because of the increased instability of the global system. Therefore, if the global system becomes intrinsically more stable, it should also give incentives to invest on a broader basis. You are correct, however, that the Terra wouldn't be used as a store of value, and therefore it wouldn't be the currency to keep capital in storage.

**Tesa: And who else benefits besides business?**

**Bernard:** Regular folks. The Terra would benefit regular folks as the typical booms/bust of the business cycle automatically decreases, a more dependable economic environment becomes possible, which will translate into more reliable job employment opportunities and less job instability.

**Grant:** I don't get how the Terra has the capacity to single-handedly make a noticeable difference on the boom/bust bus. Cycle, when it is only a complementary currency.

**Bernard.** The use of the Terra would automatically tend to *counteract the prevalent business cycle*, thereby improving the overall stability and predictability of the world's economic system. This is so because corporations have by definition an excess of raw materials when the business cycle is weakening. They would therefore tend at this point of the business cycle to sell more raw materials for storage to the Terra Alliance, which would pay for them with Terras. These corporations, so as to avoid the demurrage charges, would tend to spend the Terras immediately to pay their suppliers. These suppliers in turn would have a similar incentive to pass on the Terras as medium of payment. The spread of this increased incentive to trade with this currency would therefore automatically activate the economy at this point in the cycle.

It is important to understand that whenever the global business cycle would be in a boom period, this mechanism would work in reverse and stabilize the economy in the other direction. In a boom, corporations would have a systematic incentive not only to stop selling new inventories to the Terra Alliance, but also to cash the Terras in (and incur the 2% penalty charge), just to take delivery of the raw materials themselves. This would reduce the amounts of Terras in circulation when the business cycle is at its maximum, thereby cooling off the economy at this point. In summary, the Terra denominated exchanges would tend to automatically dampen the business cycle by providing additional monetary liquidity in counter-cycle with the business cycle thereby compensating for the pro-cyclical pattern observed in the money creation process of conventional national currencies.

By the way, demonstrating the Terra's capacity to reduce the amplitudes of the business cycle globally is the main purpose for developing a model of the world economy that would include the Terra. We have a precedent of the WIR, a complementary currency that has proven to stabilize the business cycle of the Swiss economy. I am providing a synthesis of the findings of a quantitative study on that effect in a separate file (WIR.doc)

**Tesa: Can you expand on how the Terra benefits less developed countries?**

Currently, as a direct result of currency instability, LDCs suffer from a lack of investments. Furthermore, the degradation of terms of trade with developed nations, and the scarcity of hard currencies create debt traps resulting in the inability to repay foreign loans. The Terra mechanism helps to address these problems and offers two distinct and important benefits to LDCs. A stable international currency enables greater opportunities by which to conduct commerce and make investments in developing countries. As noted earlier, because of the instability created by floating exchanges, there has been approximately a 33% decrease in investments to Less Developed Countries. LDCs that produce commodities (i.e., raw materials such as copper that are components in the basket of the Terra) would be in a similar position as any producer member of the TRC Alliance. By virtue of the fact that the Terra is a commodity-backed currency, LDCs would find themselves in a position similar to gold-producing countries during the gold

standard days: What they extracted - gold - was in fact directly an internationally convertible currency.

**Grant:** I don't really get the debt piece. The primary source of debt are banks lending to governments. I don't get how the Terra's existence impacts the banks' incentives to invest in the 1/3<sup>rd</sup> world. Why would the banks still have incentives to invest in the 1/3<sup>rd</sup> world if they are not getting interest back, and it is in fact costing them money to keep their money there?

**Bernard:** The point here is that LDCs that produce components of the basket are producing directly internationally accepted money. Currently, those countries have to *sell their production* in commodity markets to get money, and that very process of dumping the commodity in the markets further depresses the value of those commodities. LDC's would therefore be less dependent of bank loans to purchase what they need as imports.

**Grant...** Still, it does not seem that the Terra significantly changes the structure of financial decision-making to benefit the third world. I mean, if you are Bangladesh and you hold no natural resources, or none of the 12 commodities the Terra is based on, you are still out of the game, or am I missing something?

**Bernard:** The Terra is no panacea. It doesn't solve the problems of countries that don't produce anything of value for the global economy. But I claim it doesn't have to solve *all* problems to be worthwhile. The number of problems it does address is sufficiently broad as it is. There has been a growing concentration in the financial system. At the beginning of the 1970s, there was a short period where the liberalization of the financial exchange market, created some competition between the financial institutions. By the 1980s, we saw the emergence of a cartel that ran the show...controlled the flow. that runs the show. It's not just US bank by the way. It's also Deutschebank, Barclays etc. With the Terra... anybody who produces or owns one of the components of the basket is a creator of money without having to sell it in the market. You and I can actually make a contract in Terras. We don't use Terras and don't need Terras to make a contract but we need some standard of value for our exchange. Of course, if you and I make a contract in Terras without a newspaper telling us the value of the Terra, our contract would not mean anything. You need to have some of it happening out there (excess inventories need to be exchanged for Terras that are fully backed).

**Tesa: And how does the Terra positively impact developed countries?**

**Bernard:** the developed world is facing its first simultaneous economic downturn since the 1930s. If the Terra were implemented now on a sufficient scale, it would help re-launch the world economy by injecting international liquidity that would reactivate the global economy.

**Tesa: Who else benefits?**



**Bernard.** The folks who are empowered by the new game are the producers of the major raw materials and services that become part of the basket. The folks who are producing components of the basket are basically in the position of the gold producers during the gold standard days. In other words, if you were producing gold in the gold standard days, you were extracting ‘money’...i.e. you did not have to sell it (the way you would have to sell diamonds, in order to have money). With the Terra, I extract copper and I obtain Terra (I don’t have to sell it).

**T: Is this *really* a win-win all around? Who are the folks who will feel most threatened? How about the banks?**

B: In the short-term, the banks will perceive the Terra as a threat because they currently have the monopoly in the creation of money, and the Terra will definitely challenge that. I have an answer to the banks’ concern, however! The fact of the matter is that in the long run the banks would actually benefit from the Terra because the fastest growing sector in trade is counter trade. Counter trade is growing at a rate of 5% per year, 3 times faster than trade facilitated in conventional currencies. The banks have no role in that because counter-trade deal is different, and the banks don’t have the requisite knowledge to get involved in counter-trade as it currently operates.

What the Terra would do is to standardize counter trade, and by doing so, it would make it bankable. What I mean is that while I could not open an account in flat glass or copper or camel ears, I would be able to open an account in Terras! Banks will be able to provide traditional foreign exchange services utilizing the Terras, which can then be converted into any and all other national currencies. They can, as well, provide their customers services such as Terra account management, as they do today with any foreign exchange. The Terra will also benefit the banks in two other ways. The counter-cyclical impact of the Terra mechanism will stabilize the value of banking loan portfolios. There have been numerous major banking-related crises around the world over the past two decades, in which borrowers can’t repay their loans, while the collateral upon which the loans were based depreciates. These conditions are aggravated by the boom/bust cycle and currency fluctuations. Therefore, as the Terra mechanism helps to stabilize economic cycles, the number and severity of crises in bank portfolios would also be reduced. Finally, the task of central banks would also be made a bit easier with the Terra mechanism in play. Not only would there be fewer banking crises to manage, but also their routine job of trying to counteract the business cycle would be eased as already demonstrated in practice by the WIR.

**T: How about the United States?**

B: The United States is currently the big boy in the global system because they control the dollar, but the Terra would not be controlled by the United States because they are not the producers of the raw materials that are the components of the commodity basket. In our present system, if the United States don’t like Cuba or Chile, the US can cut credit to

these countries. But with the Terra, if these countries are major commodity producers, they would get Terras regardless of whether the US or anyone else likes that.

**Tesa:** I'm curious about how you think the Terra will be able to succeed if it challenges the short-term interests of both banks and the United States government, entities that have a pretty strong track record at putting sticks in the wheels of many a good initiative?

**B:** Well, that's the beauty of the Terra, that it actually does not require the blessings of banks or governments in order to become operational. It only requires the participation of the private sector who can single-handedly activate the Terra. And I really believe that it is the private sector that will activate the Terra. They have the most to benefit from it, and the banks will let the private sector do it because they cannot afford to alienate their major clients.

While the banks can continue doing what they are doing now with conventional money, the Terra game is outside of their control. Therefore, everything that exists today as monetary and financial products or practices continues to exist. The Terra mechanism is only one additional option available for those international economic actors who voluntarily choose to use it.

**Grant:** Would not the Terra have the effect of accelerating the decline of the dollar as it replaces the dollar as the international trade currency of choice... And doesn't that set up anyone heavily invested in dollars as opponents of the introduction of the Terra?

**Bernard:** It isn't the Terra that is threatening the US dollar, not more than a parachute for the pilot is a threat to a plane. Today already there is over one trillion US\$ performed in countertrade every year. The Terra being in fact standardized countertrade would first cut into countertrade volume. Furthermore, I expect that the Terra would become really significant in international trade *after* a US\$ crisis...certainly not trigger it. It's important not to confuse the sequence of events here.

### **What conditions would make the introduction of the Terra most propitious?**

Well, current conditions are actually perfect. Initiating the Terra mechanism now, when the world's major economies are in a downturn is the best timing for its introduction, since the additional economic stimulus would be beneficial to all.

**Tesa:** **It struck me that the Terra works a little bit like the lymphatic system in the body. Does that metaphor resonate with you?**

**B:** Well, let me think about it. Yes, I can see some important parallels. A lymphatic system is what irrigates the whole body and gets rid of toxins in a slow way. It works in an invisible way behind the scenes and most people don't even know its role, or that it is

there. The toxins which the Terra would progressively get rid are things like currency speculation, the short-term thinking that is behind corporate behavior and related investment decisions. The lymphatic system helps irrigate the entire cellular / tissue system, as a currency can do when it is encouraged to circulate rather than encourage to be hoarded or centralized. That is what the Terra's demurrage function makes possible... it creates an incentive for money to circulate rather than be stagnant. My friend Elizabeth Sahtouris put it best when she asked... How would a body survive if we decided that all the blood should go to the brain or the liver, or certain organs should only be irrigated with blood on certain conditions. This is actually what is happening in our world economy... all the blood is being sent to specific organs that are supplied while others are starved to death. The dollar system is actually an embolism... which is characterized by the accumulation of blood in one place.

All the different organs of the earth community need to be irrigated to flourish and to be in right relationship to each other... The dollar is currently being distributed based on a centralized decision making system controlled by a few financial institutions.

**Tesa:** When we were talking earlier today about all the different types of projects in which you are currently engaged, and I asked you what you felt you absolutely needed to accomplish with your life, you answered without a second of hesitation... "the Terra." Can you say more about why you feel this is your most important project?

**B:** Well, there is now a lot of attention being paid to Yin currencies. That part of my work is already well in motion. A lot of people are working on this piece now and moving it forward. There is a whole movement emerging. If I disappear, I think this will proceed. But if I don't move the Terra forward, however, I am not sure that it will happen. You see, I have got a lot of very specialized training that I have acquired over my entire life, and that enables me to steward this particular initiative... it really calls on a lot of technical expertise in a number of domains. Very few people would actually have what it takes to move this particular initiative forward.

So, that's why I feel that the Terra is the most important piece of work for me to accomplish. I also feel that the time for the Terra is now coming.

### **How so?**

I know that there are people around the world who are waking up and becoming aware that the dollar problem is real and I believe that if they knew about the Terra they would get excited. It's actually already happening in the high-net worth investment world. There are lots of people buying commodities right now because they want to get out of having dollars. The post-dollar world is becoming real. In the map of what I'm seeing happening... people are getting panicky and getting ready to step out of dollars and getting in commodities. I'm talking about people with billion dollars who are buying copper mines for hundreds of millions of dollars as we speak.

That is a context in which conversations about the Terra (not necessarily with these people above) is becoming much more relevant. The folks who are waking up that I just talked about are trying to save their skin and the Terra is not the solution to that, but the same awareness that is waking those folks up are also waking up the CEOs of corporations and major multi-nationals who have the capacity to make the Terra happen. These are the folks to whom I would like to be able to talk right now.

I also believe that 2008 would be a good year to get the Terra going.

### **What have been the main obstacles to moving the Terra so far?**

*The Terra involves a deep paradigm shift, and all paradigm shift typically meets massive resistance for different reasons.*

The hardest point is to get the perception of time to shift. That's the main mental blockage. The purpose of the Terra is to switch the perception of time so that the future becomes more important than the present.

It also involves breaking the monopoly of the banks. I have never seen any monopolist giving up their monopoly gracefully. The problem however is that some of the folks who would benefit from that do not necessarily get it. Many people (like David Korten) see all multi-national corporations as evil.

The Terra is being seen as helping big corporations and folks see big corporations as part of the problem, so it's hard for them to feel excited about the Terra.

### **What would you say to that?**

Without the corporations, we are not going to get out of the mess... We cannot do away with big capital. We need to understand that there are very powerful interests vested in the conventional money system. Any strategy that seeks to change this system directly will face tremendous resistance and ruthless opposition. That's why previous proposals by well-known economists to create commodity-basket currencies like the Terra have all failed. They were all introduced as attempts to *replace* the conventional money system. That strategy is a non-starter given current political and economic realities. Its likelihood of success is pretty much nil.

I believe that the Terra can succeed where others have failed because it would be introduced as a complementary currency designed to operate in *parallel* with the existing system. Anything that exists under the current monetary modus operandi would remain in operation after the introduction of the Terra.

**And that is intended to minimize any direct adverse effects to these vested interests, and therefore resistance to the introduction of the Terra?**

Precisely. The Terra would emerge in parallel to the existing system. In the long term, however, the conventional system will get slowly displaced as folks engage in new behaviors. This is why it is a bridge currency in Debbie's framework.

**What are other challenges you have been facing?**

Theoretically, the Terra could be implemented by any credible international organization. IT could be the World Bank or the IMF or the Central Banks, theoretically. In practice, it is impossible because all of them are tied into existing bank interests.

*The Terra requires corporate leadership that is not symptomatic or reflective of individual corporation level thinking.* It requires corporate leadership beyond the one-corporation lense., by which I mean out-of-the box, visionary, service-oriented leadership. Unfortunately, the people who are leading corporations are completely thinking through their corporation's lense. I found one person in a major multi-national who was an exception, but his board did not allow him to move forward.

The folks who are most likely to be willing to support the Terra in the short term are visionary types of philanthropists, folks like Carol Newel. But it is not always easy to reach out to folks like that because the Terra is a very abstract and dry.

Finally, as stated earlier, the political context for an international monetary treaty has not been available. The Terra avoids this pitfall by relying on private initiative. From a legal or tax standpoint, it would fit within the existing official framework of countertrade, and not require any formal governmental agreements to make it operational.

**Grant...** You are saying that nearly 97% of financial transactions don't correspond to exchanges of goods or services, and are speculative. But why is it that the Terra would not lend itself to arbitrage trading between the Terra & existing currencies.

B: The Terra wouldn't be a useful instrument for *speculation*, because speculators look for the higher volatility. So if oil is very volatile (as it is now), why would you want to buy Terras where its volatility is dampened by a dozen other commodities and services? If all the components of the Terra are tradeable, it always makes more sense to speculate on the components rather than the basket.

In contrast, I expect *arbitrage* to occur on the Terra, and that would be fine. Arbitrage would simply ensure that the Terra's value is lined up with the values of the different components. Arbitrage doesn't destabilize a value, it actually improves the price alignment and provides liquidity that would be welcome.

**How can we make the concept of the Terra more relevant to folks who will never get involved in global trade, or for whom this just does not feel like a ‘personal’ issue? Why should they care?**

If I were to make an inventory of all the things that are in your suitcase, or in most people’s closets, it would be clear that every single one of us is highly dependent on the continued health of global trade for nearly everything we use and wear.

**What do you need to make the Terra happen?**

I still need \$10,000 amount to activate the next phase which is to develop the model of the world economy with the Terra in it. With Jim’s and your fundraising support, I have already secured 80,000 EUROS (i.e. \$120,000) and need 100,000 EUROS/\$150,000 to activate the next phase. Four Tipping Point Network members (Lori, Jim, Howard and you) have each recently given an additional \$5,000, for a total of \$20,000. The world that becomes possible once we release the monopoly of conventional money requires both the Terra and the local social purpose currencies. But they both need to grow to a level currently unthinkable to be able to replace current currencies.

**Yes, definitely. And what will you be able to do with this money?**

Three things.

- (1) *First, it would be able to create solid evidence of the Terra’s feasibility and impact.* I would work with an economic think tank (university or other institution) to develop a model of the world economy with the Terra in it. That piece would give me hard core supporting evidence to meet with key players of global trade and get them interested in participating in a Terra pilot. The model would allow me to show them what the Terra would mean to their sector, and what it would make possible. I could actually go forward with the Terra without the model if the pilot prospects really got it. Someone at a major multi-national was ready to go forward, but it was vetoed by the board. A model would make it much easier to get buy-in.
- (2) *Second, it would give me the means to go talk to the folks whose participation is needed for both the (a) research & design of the model, and (b) the implementation pilot.* Those folks are all over the world, and it’s important for me to be able to meet them face-to-face. For the implementation of the Terra, I need to enlist the participation of about 10-20 multinational organizations. The strategy is for the Terra to become their project. Ideally, one organization would want to go forward, and would organize the other players (possibly some of the clients and trading partners) and organize the meetings. There would be another chair. I would not be the conductor. Anyway, the bottom line is that, I need resources to go meet with these folks where they are, build the relationships, inspire them to play.

- (3) And finally, it would pay for my own time to go have those conversations, work on the model with the think tank organization that takes on its development, and write the monograph that needs .

### **What is your actual strategy & action plan?**

As soon as I have secured the full 150,000 EUROS, I would get started with the model. I probably would involve the New Economics Foundation in London or an American University like *MIT*. My strategy is to give the glory to someone else who is respected, and has the intellectual capital to help develop the model. But money is needed in order to involve one of those institutions, because one needs to form the partnership with one of their professors who is interested in the topic, and they would actually need to get funded to be able to move forward. So if you come with \$50,000 to MIT or the New Economics Foundation, you are more likely to get folks' attention than if you just come with a good idea. I would of course work with them, but it's important for me not to do this alone, so it's not just Bernard-coming-up-with-a-model.

I would also create a monograph that goes with the model....and whose exact nature would depend on what the model looks like. It would be like a documentation of the model. It has to show why the model is true.

### **Does this budget & strategy actually reflect your ideal course of action?**

Well, there are quite a few possible courses of action. The budget and strategy that I presented to funders is the shoe-string version. It is an attempt to take short-cuts to get the Terra on its feet at the least cost and in the speediest way. There are two key short-cut avenues: (1) the first is to secure the partnership of a multi-national or two that are willing to develop the model themselves. Two of the multi-nationals I approached were almost ready to do this, but they each fell through. If something like that happened, I would actually save the costs of developing the model; (2) the other short-cut avenue is for me to develop the model at the lowest cost; I could pull off the model more or less by myself, for \$40,000, using the Oxford model of the World Economy.

Now, if we were to remove all sense of pressure to think in terms of short-cut strategy, and instead have a conversation about possibility ... well no, I would probably go about things differently. First I think that I would make sure that the model gets developed no matter what because it improves the chances that a large number of people can get the value of the Terra. This said, I could still go forward with the implementation team without the model being ready (if they were prepared to do that). These two things could be autonomous from each other. Second, I would involve more than one think tank in the development of the model.

**Please say more about the kinds of folks or organizations you would ideally like to enlist in the development of what you call “the model of the world economy with the Terra in it”?**

Ideally, I would like the model to be developed by an alliance of several credible think tanks from different key countries, because their endorsement of the Terra would most speedily move the initiative forward once the model is ready, and support the currency’s adoption by key corporate players in that country. Securing the participation of those different think tanks would take a bit longer to set up, and it would cost more money, but the great advantage of that strategy is that many different types of folks would be vetting the model, and that would make the promotion stage that much easier. It would also reduce the risks of some key countries feeling like the model is biased because it was developed by the Americans or the Brits, rather than a consortium of different players reflecting different perspectives and interests.

**Can you give some details about the actual players you’d like to invite?**

Yes, I would likely pick the following configuration of think tanks...

- 1) An American University like Harvard, MIT, Stanford or Chicago. Chicago would be particularly interesting to have involved because of its right-wing reputation.
- 2) The New Economic Foundation in England
- 3) E4 in Germany. E4 is a think tank and I already have a connection to them. When I talked to them last, about a couple of years ago, they wanted about 20,000 Euros in order to participate, and I would have needed to use a doctoral student from Germany (that would also need to be paid).
- 4) A think tank in Japan. I have several options there, and have not decided which one would be best.
- 5) A think tank in China. In this case, I would need a connection to someone in China who could help identify the best local partner, some kind of reputable geopolitical entity whose endorsement in China would have great significance. China is especially important, because if the Chinese were to adopt the Terra, everyone else would follow. The Terra by the way could become a great solution to the Chinese’s main problem which is that the more deals they make, the more dollars they get, and they don’t know what to do with their dollars!

I could also obviously use a lot more money to make noise, once the model is ready and I’m at the promotion stage. The money used by the Club of Rome to disseminate its work and findings was half a million dollar! My current budget does not include this.



**Brussels, November 27, 2008**

**Dear Friends of the Terra,**

First of all I want to thank every one of you for your interest in the Terra project, whether it took the form of financial or any other form of support. I present my apologies that it took me this long to send you an update. The recent banking crisis greatly altered the global financial landscape and obliged me to suddenly and fundamentally rethink my overall strategy for moving critically needed currency innovations like the Terra forward. What follows is intended to bring you up to date on my thinking and revised strategy.

Thanks to Tesa's, Jim's and your involvement, the funding target of 100,000 Euros for starting phase II of the Terra was reached at the end of August 2008. Phase II, if you remember, involves creating an economic model of the Terra's impact. Once the funds were secured, I immediately made contact with Gernot Nerb, the head of the research department of IFO, the largest econometric forecasting think tank in Germany. He accepted to get personally involved in the Terra modeling project. Gernot was the person who designed and implemented in Germany the business sentiment index (known as the IFO index) that quantifies how businesses perceive the economy over the next few quarters. He has thereby obtained substantial experience and credibility around the world on the topic of business cycles, something that would be critically useful in our Terra project, given that the aim of the modeling effort is precisely to reduce the swings of the global business cycle. So, by September 2008 we were poised to launch the Terra modeling project. That is precisely when all hell broke loose in the global banking and financial system. What had started as an American "subprime" crisis in 2007 suddenly mutated into a global banking crash.

I can't say I was surprised about the event itself, as I had forecast such a systemic crash in *The Future of Money*<sup>1</sup>. To be more precise, I had described an unprecedented convergence of four global megatrends that would force us to rethink and redesign our money system in the period between 2005 and 2020. As a reminder, these four megatrends are respectively: the financial consequences of an aging society, climate change and species extinction, high structural unemployment, and...financial and monetary instability. Since this was first published nine years ago, there has been a growing mainstream acknowledgement in the media of the first three issues. But the vast majority of the specialists and the media simply remained in total denial that a financial crash was even possible. Even I was surprised, however, by the timing of the arrival of this missing "fourth cavalier": only weeks before an all important election in the US.

My own life suddenly got stuck on fast forward as I was flooded with calls and emails from friends, colleagues, and numerous organizations and institutions all trying to figure out the same thing: "What should we do now?" I still remember one weekend in October when I received 3000 emails.

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<sup>1</sup> First published in German in 1999, and in English in 2001. It has since be translated in eighteen other languages .

The question I had to wrestle with was: How can we best mitigate the expected short-term ripple effects of this unprecedented financial crisis while leveraging the opportunity to move forward the currency innovations that are required to provide a long-term structural solution? The Terra obviously remains a critical part of that long-term solution. The problem, however, is that under the most optimistic assumptions, it will take three to five years for the Terra to get operational on any significant scale, because of the legal and institutional innovations required. We cannot afford to wait that long to address the current crisis, and find quicker and easier ways to reduce the devastating impact that this systemic banking crash will have on ordinary people as it turns into a full blown economic recession, which will likely be the most complex in world history.<sup>2</sup> The imperative to develop effective short-term solutions is what prompted me to write the “White Paper on the Options for Dealing with Systemic Banking Crises”, an early version of which you received at one point or another.<sup>3</sup> Its latest version is always available on my personal website.

In light of what happened this Fall, I believe that the wisest course of action is to put the Terra on hold for a few months in order to focus on introducing a monetary innovation that can most effectively and rapidly mitigate the likely impact of the financial crisis. In my opinion, that solution is a Business-to-Business (B2B) mutual credit system, because that is what will make it immediately possible for businesses to avoid having to fire as many people as would otherwise be the case<sup>4</sup>. The strategy to implement such a B2B mutual credit system involves the use of a software for multiple complementary currencies, including a B2B function. A breakthrough was actually achieved in Paris in this domain, and a multiple complementary currency software is soon going to be available worldwide, in Open Source. There is now a growing traction in Europe for experimenting with such a structural change. I expect to have a few pilot projects launched early next year. I also believe that there will be funding available in 2009 in Europe for this type of work (quite possibly from the European Union), which is the reason that I am pushing to have pilot projects in several EU countries (when several countries EU countries are involved, it is a lot easier to get EU funding). This B2B currency project clearly shouldn't be limited to the Euro-zone, although it is a logical place to start it. I already have requests to get the same strategy launched in Chile, and in a three-country development project on the Senegal River in Africa. As several of you know, I have also been feeding the “White Paper on Managing Systemic Banking Crises” to a personal contact in Obama's economic team, and to the Mayor of San Francisco.

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<sup>2</sup> If we add in the Citibank bailout announced in November 2008, the total commitment to the American taxpayer of the bailout exceeds now \$4.616 trillion dollars! The only event in American history that comes even close to matching such an amount is World War II: Original Cost: \$288 billion, Inflation Adjusted Cost: \$3.6 trillion. It is hard to believe, but true, that the US bailout has cost more than the inflation adjusted cost of the Louisiana Purchase, the New Deal and the Marshall Plan, the Korean and Vietnam War, the S&L debacle, NASA and the Race to the Moon *combined*! See detailed numbers in <http://www.ritholtz.com/blog/2008/11/big-bailouts-bigger-bucks/>

<sup>3</sup> The latest version of this policy paper is available for download on my personal website [www.lietaer.com](http://www.lietaer.com).

<sup>4</sup> This is because of the spontaneous countercyclical use of a B2B currency as proven by the WIR case in the Stodder paper available on my private website [www.lietaer.com](http://www.lietaer.com)

However, so far I haven't heard anything back from them. Furthermore, the nomination of Paul Volcker to head Obama's economic team probably means that the US will remain with the more traditional Keynesian relaunch, rather than experimenting with structural changes (which I am personally convinced will be needed.) Paul Volcker is a man for whom I have enormous respect as a central banker, but it would be unprecedented that he would be open to looking outside of the box of the monopoly of conventional money.

Let me assure you that the Terra project remains very much on my agenda, but I believe that the best time to move it forward will be *as soon as* a B2B mutual credit system is first put in place? Here is why:

(1) I do not have the capacity to work on both the economic modeling of the Terra and the B2B currency at the same time, and under the current circumstances, I believe that the latter must take precedence. With the agreement of Mr. Nerb at IFO, I have put the modeling project on hold.

(2) The B2B currency can actually serve as a stepping stone to the Terra. The Terra itself is a special kind of B2B currency, so it can be seen as a special application of the broader strategy described in the White Paper. The B2B currencies will be introducing the concept of commercial purpose complementary currencies in a context where businesses will see the immediate and helpful need for it. For most corporations on the planet, this would be the first time they would use something else than national money to make a payment. This will make it easier to introduce the Terra later on.

(3) The primary purpose of developing an economic model for the Terra was to demonstrate the value of the currency in case of a financial and/or monetary crash. In this post September-October era, that case becomes a great deal easier to make. While I believe that an economic model will still be helpful, developing it is not as critically important to moving the Terra forward as it was a few months ago.

The current plan:

My intention is to personally support the start-up phase of B2B currencies (as a catalyst and advisor, not a project leader), and turn my attention back to the economic model for the Terra, just as soon as this first goal is accomplished. I currently estimate that this will take less than a year.

While I focus on the development of B2B currencies, Tesa and I will be looking for opportunities to create exposure for the concept of the Terra amongst top level management circles. We will be particularly be looking for opportunities to publish in publications that are read worldwide by the business elite, such as the *Harvard Business Review*, *Financial Times*, or *The Economist*. A part of the funds raised will go toward hiring someone to produce a publication-friendly version of my Terra White Paper and Tesa's January 2008 interview.

## Requests

To conclude, I have three important requests:

1) I would like your blessing to use 1/3 of the funds raised to move the Terra forward (i.e. 33,000 EUROS out of 100,000 EUROS) to move the B2B currency forward while European money is being raised here to fund the B2B pilot fully. Foundations and corporations will soon have much more reasons to pay attention to the Terra and I feel fairly confident that the 33,000 EUROS applied to the B2B project will not impede the Terra's ability to move forward when the time comes to be fully focused on that. If you have concerns or issues with this plan, please let me know by December 31. If I do not hear from you, I will assume that you are ok with this revised strategy.

2) If you or someone you know has better contacts than I have to Obama's team, it might be useful to feed the White Paper about the Banking Crisis and possibly additional input into that team, so that they will at least know about the availability of a systemic strategy. If one of you is in a situation to do something about this, please contact Tesa or me personally.

3) Tesa and I are looking for connections to journalists working for publications about the Terra such as the Harvard Business Review, the Financial Times or the Economist. We would appreciate help with that if you have the right connections. We will need to find some help to do such professional re-writing for this specific audience.

I hope all of you enjoyed a happy Thanksgiving!

Bernard  
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