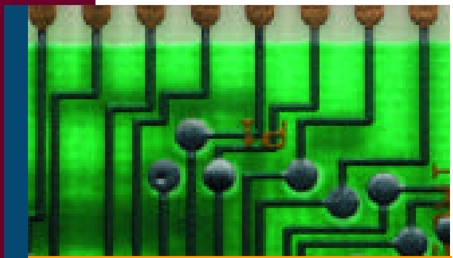

BY MICHAEL H. CARROLL

European Single Currency

Beginning on January 1, 1999, member countries of the European Union will move toward using a single unified currency, the euro. This change presents new opportunities and challenges for businesses, individuals, and IT departments in Europe and around the world.

EUROPEAN Monetary Union (EMU) will take effect January 1, 1999. The member countries of the European Union (currently 15) will move toward using a single unified currency — namely the euro. This article examines the developing process, the time frame involved, and the impact this change will have on European and world trade. Needless to say, there are also major implications for IT departments across Europe and beyond as a result of these changes.

In May 1998, the first groups of participating currencies will be determined. Based on strict economic and monetary policy over the last few years, the first wave of countries to join the single currency will be established. Each of the 15 EU countries has the right to "opt out" of EMU at this time. Although the United Kingdom has met all the qualifying criteria, it will not join EMU immediately due to internal political reasons. Figure 1 shows a table of EU countries, their present currencies, and the likelihood of whether they will be among the first group of participants. The new European Central Bank will also be established in mid-1998.

On January 1, 1999, the participating currencies will cease to be recognized as distinct currencies on international money markets. The German mark, the French franc, the Dutch guilder, etc., will all disappear. In their place the euro will be the currency that will float against the dollar, yen, sterling, and others. However, each of the participating currencies will still exist internally within its country's own borders, and each currency will have a fixed exchange rate against the euro. So, to convert marks to francs for example, marks will first be converted to euros, then from euros to francs.

Beginning January 1, 2002, each national currency will be converted to euros and all notes and coins will be changed. By mid-2002 all participating countries will be using the same international and domestic currency. Although this is similar to the way the United States presently uses the dollar, the main difference is that each "state" in this instance is a unique sovereign country, with its own language, culture and political institutions.

ONE CURRENCY

The benefits of this change are enormous. EMU trading partners will now conduct business through one currency within the EU. All external trade will be against the dollar-euro, yen-euro, etc., exchange rate. Within EMU, all exchange rate commissions will be abolished, allowing considerable savings to businesses. Banks and financial institutions will, however, lose out on this lucrative form of income. Interest rates will be consistent across Europe and will likely fall as a result of EMU.

CURRENCY CONVERSIONS

In the interim between EMU inception on January 1, 1999 and the introduction of euro notes/coins in 2002, very specific instructions have been issued for converting from one EMU participating currency to another. As stated previously, there will be a fixed exchange rate between the euro and each "old" currency, and this will be expressed to six significant figures or decimal places. The actual rates will be set very close to EMU implementation.

Figure 1: EU Countries and European Monetary Union

Country	Present Currency	Join EMU in 1999?
Austria	Schilling	✔
Belgium	Franc	✔
Denmark	Kroner	❶
Finland	Markka	✔
France	Franc	✔
Germany	Mark	✔
Greece	Drachma	❷
Ireland	Irish Pound	✔
Italy	Lira	✔
Luxembourg	Franc	✔
Netherlands	Guilder	✔
Portugal	Escudo	✔
Spain	Peseta	✔
Sweden	Krona	❶
United Kingdom	Sterling	❶

Notes :
❶ Denmark, Sweden and the UK are not joining for domestic political reasons.
❷ Greece will not meet strict monetary qualification criteria.

Figure 2: New Euro Currency Symbol

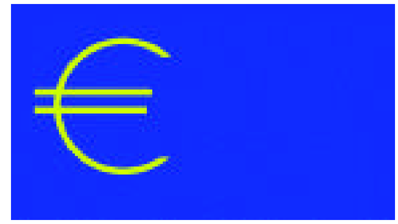

Figure 3: ISO Currency Information for Euro

Currency Name	**euro**	
Alpha Currency Code	EUR	
Numeric Currency Code	978	
Minor Units (decimal places)		2

For example, one euro might equal .773427 Irish pounds or 6.57045 French francs. Whatever the rate is, it must be used for all conversions and it must not be rounded, truncated, or inverted. However, rounding after a conversion is calculated is allowed. Equivalent Irish pound or French franc amounts should be rounded to the nearest penny or centime respectively. Equivalent euro sums should be rounded to the nearest cent (100th of a euro).

When converting from euros to Irish pounds, for example, the amount is multiplied by the conversion rate. When converting from Irish pounds to euros the sum is divided. For example

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1,000 euros = 1000 x 0.773427 = IR£ 773.427
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which rounds to IR£773.42

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1,000 IR£ = 1000 – 0.773427 = 1292.946845
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which rounds to 1,292.95 euros.

While these rules apply to participating country currency conversions, they also apply when a third country (outside EMU) is converting one participating currency to another (accurate to six decimal places), e.g., a £IR/FF conversion being performed by a UK bank!

The euro also introduces a new currency symbol, which is shown in Figure 2. Note, however, that currently there is no such currency symbol on PC keyboards or printer character sets. However, most banks gearing up for the euro will show the value preceded by the characters "EUR." So, for example, a value of Irish pounds currently shown as "IRE 100.00" might be displayed/printed as "EUR 100.00."

BUSINESS

When will business start dealing in euros? Most retail/cash handling organizations will only convert their cash handling and accounting systems to euros when the new notes and coins come into circulation in 2002.

Others may convert "non-cash" transactions to euros with increasing frequency after EMU starts in 1999. Most major financial institutions in the EMU sphere of operation will offer accounts with euro features from January 1999. The biggest impact from an IT point of view will be the presence of two currencies in the interim period 1999 to 2002. Systems such as payroll, accounting, invoicing, etc., will all have to become "multi-currency" and provide the ability to perform conversions using six decimal place exchange rates! As can be imagined, systems and software compliance will be a key factor in determining the cost and resources required to cope during transition and on final conversion in 2002.

FROM AN INTERNATIONAL PERSPECTIVE

From an international financial perspective, those countries dealing with EMU states will, after 1999, conduct their trade on the basis of the value of their currency against the euro. The International Standards Organization (ISO) defines the euro as outlined in Figure 3. Credit card companies and international markets will use this definition for exchange rates after January 1, 1999.

THE IMPACT ON BANKING

The impact this will have on banking institutions in EMU countries is enormous. Fiscal policy regarding currency control, interest rates, etc., will now be under control of the European Central Bank (ECB). Exchange rate commissions between EMU participants will disappear, so a lucrative source of income will dry up. In addition, the need to show dual amounts at point of sale terminals, on ATM receipts, and credit card and bank account statements will add a major headache to the already stretched IT sector currently battling against Year 2000 compliance.

NOTES AND COINS

The real crux for retail and consumer alike will occur when the notes and coins are issued in 2002. The "old" currency will cease to exist as legal tender and the euro will become all powerful. There will be seven new notes denominated as 5, 10, 20, 50, 100, 200, and 500 euros. There will be eight new coins denominated as 1, 2, 5, 10, 20, 50 cents, and 1 and 2 euros. Most people will not get paid in euros until the new notes and coins come into circulation. The method of cutover is still unknown at this time, but you can be sure it will be one vicious learning curve! There has been much speculation about the way goods will be marketed; the old 5.99 price tag on the supermarket shelf will look decidedly unattractive at a new 7.37, for example. Will these changes provide an opportunity for an unscrupulous shop-keeper to hike his prices? He'll hardly lower them, will he?

SUMMARY

Europe is entering a new era and a new dimension. Different countries,with unique languages, cultures, political, and banking systems are embarking on a new course for the new millennium. A possible eleven countries will adopt a single European currency on January 1, 1999. It presents new opportunities and many new challenges for businesses, individuals and IT departments. This should prove to be an interesting time to be working as a software consultant in Europe! ts

NaSPA member Michael H. Carroll has 19 years of experience in the data processing industry. He's worked in both manufacturing and financial businesses, performing systems and applications programming for mainframe and client/server environments. Michael is a consultant currently working on Y2K projects for a large financial institution in Ireland.