The reason of this work is to unify the knowledges about European arrest warrant into international judicial cooperation in criminal matters, to show the differences between process of classic extradition and extradition on the grounds of European arrest warrant and to demonstrate an implementation of the Council framework decision on European arrest warrant and the surrender procedures 2002/584/JVV into the Czech Republic legal order and some other European Union member states. The work is composed of four chapters. Chapter one describes the history of the institute of international judicial cooperation in criminal matters and the grounds of the idea of European arrest warrant. Chapter two defines the term extradition, explains its main principles and compares the process of classic extradition and extradition on the grounds of European arrest warrant. In chapter three is analysed the Council framework decision 2002/584/JVV, its principles, its relation to international treaties dealing with judicial cooperation in criminal matters (especially the European convention on extradition) and the implementation of this framework decision into the Czech Republic legal order and legal orders some other European Union member states. In this chapter is also illustrated the decision of the Czech Republic Constitution court about constitutionality of czech transposing legislation. Chapter four describes the process of filling of the form of European arrest warrant on the ground of the European handbook on how to issue a European Arrest Warrant.