

## NAME

ECPKParameters\_print, ECPKParameters\_print\_fp - Functions for decoding and encoding ASN1 representations of elliptic curve entities

## SYNOPSIS

```
#include <openssl/ec.h>
```

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining **OPENSSL\_API\_COMPAT** with a suitable version value, see **openssl\_user\_macros(7)**:

```
int ECPKParameters_print(BIO *bp, const EC_GROUP *x, int off);
int ECPKParameters_print_fp(FILE *fp, const EC_GROUP *x, int off);
```

## DESCRIPTION

All of the functions described on this page are deprecated. Applications should instead use **EVP\_PKEY\_print\_params(3)**

The ECPKParameters represent the public parameters for an **EC\_GROUP** structure, which represents a curve.

The **ECPKParameters\_print()** and **ECPKParameters\_print\_fp()** functions print a human-readable output of the public parameters of the **EC\_GROUP** to **bp** or **fp**. The output lines are indented by **off** spaces.

## RETURN VALUES

**ECPKParameters\_print()** and **ECPKParameters\_print\_fp()** return 1 for success and 0 if an error occurs.

## SEE ALSO

**crypto(7)**, **EC\_GROUP\_new(3)**, **EC\_GROUP\_copy(3)**, **EC\_POINT\_new(3)**, **EC\_POINT\_add(3)**,  
**EC\_KEY\_new(3)**, **EC\_GFp\_simple\_method(3)**,

## HISTORY

All of these functions were deprecated in OpenSSL 3.0.

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