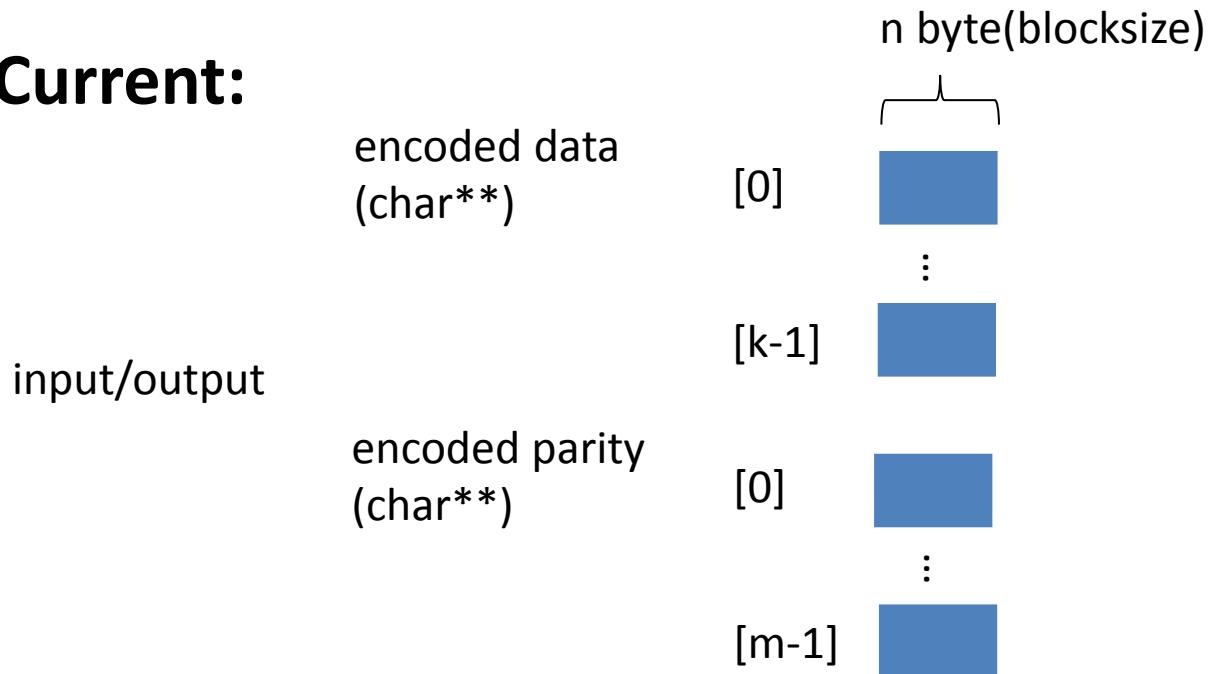


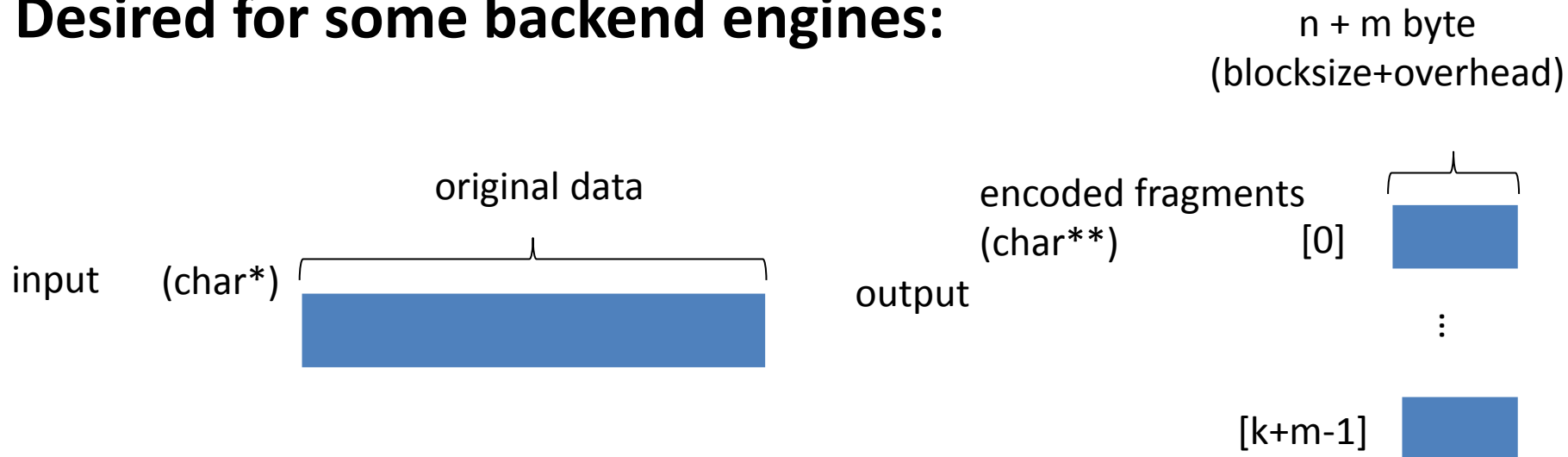
liberasurecode encode preprocess design

- `prepare_fragments_for_encode()` looks good to serve a list of pre-separated (and aligned) original data. Many of engines will be benefited.
- However, there is a couple of things to consider as follows:
 - The backend engine may require a natural sequential (non-separated) string for encode.
 - The backend engine may want to add a special data to each fragment. (i.e. pre-allocated buffer by `prepare_fragments_for_encode()` may be too small for the backend engine)
- To solve these problems, I would like to put an option to skip the preprocess.
- Note that this is the first design and it is not considered enough for eco implementation. If there is better idea, it will be great for liberasurecode.

Current:



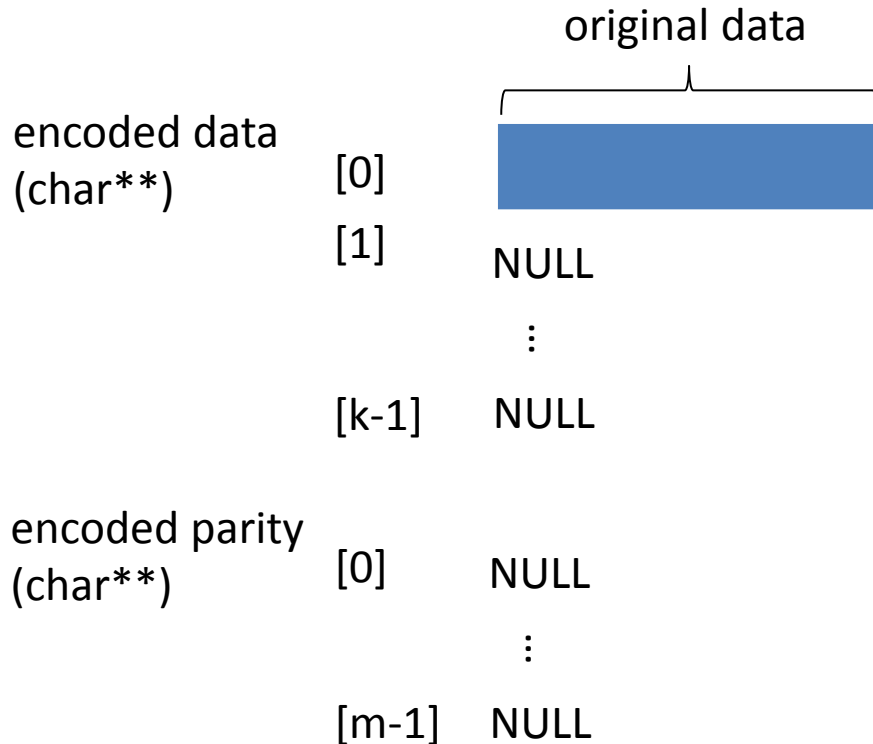
Desired for some backend engines:



Idea:

`ec_backend_common.skip_preprocess = 0 or 1 // 0: false 1: true`

`prepare_fragments_for_encode()`



NOTE: if `ec_backend_common.skip_preprocess == 1`, a backend engine **MUST** create fragments which includes `fragment_header_t` to ensure the fragment format.

Sample Code:

```
ec_backend_common.pass_preprocess = 0 or 1 // 0: false 1: true
prepare_fragments_for_encode(*snip){
    *snip*
    if(instance->common.processing==1){
        encoded_data[0] = malloc(sizeof(char)*aligned_data_len);
        memcpy(encoded_data[0], orig_data, orig_data_size);

        for(i=0; i<k; i++) encoded_data[i] = NULL;
        for(i=0; i<m; i++) encoded_parity[i] = NULL;
        goto out;
    }
    *snip*
}
```